

LEGISLATIVE RECOMMENDATIONS CONCERNING THE STOCK MARKET BREAK OF OCTOBER 19, 1987

HEARING BEFORE THE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE ONE HUNDREDTH CONGRESS

SECOND SESSION

ON

RECOMMENDATIONS AND ACTIONS TO ENHANCE THE INTEGRITY, EFFICIENCY, ORDERLINESS AND COMPETITIVENESS OF OUR NATION'S FINANCIAL MARKETS AND TO MAINTAIN INVESTOR CONFIDENCE

MARCH 31, 1988

Printed for the use of the Committee on Banking, Housing, and Urban Affairs



U.S. GOVERNMENT PRINTING OFFICE

84-768

WASHINGTON : 1988

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

3241-26

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

WILLIAM PROXMIRE, Wisconsin, *Chairman*

ALAN CRANSTON, California
DONALD W. RIEGLE, Jr., Michigan
PAUL S. SARBANES, Maryland
CHRISTOPHER J. DODD, Connecticut
ALAN J. DIXON, Illinois
JIM SASSER, Tennessee
TERRY SANFORD, North Carolina
RICHARD SHELBY, Alabama
BOB GRAHAM, Florida
TIMOTHY E. WIRTH, Colorado

JAKE GARN, Utah
JOHN HEINZ, Pennsylvania
WILLIAM L. ARMSTRONG, Colorado
ALFONSE M. D'AMATO, New York
CHIC HECHT, Nevada
PHIL GRAMM, Texas
CHRISTOPHER S. BOND, Missouri
JOHN H. CHAFEE, Rhode Island
DAVID K. KARNES, Nebraska

KENNETH A. McLEAN, *Staff Director*

LAMAR SMITH, *Republican Staff Director and Economist*

STEVEN B. HARRIS, *Staff Director, Subcommittee on Securities*

CONTENTS

THURSDAY, MARCH 31, 1988

Opening statement of Chairman Proxmire.....	Page 1
Opening statements of:	
Senator D'Amato.....	3
Senator Sasser.....	6
Senator Sanford.....	8
Senator Chafee.....	10
Senator Dixon.....	14

WITNESSES

Alan Greenspan, Chairman, Board of Governors, Federal Reserve System	18
Restructuring of Federal regulation.....	18
Prepared statement	20
Financial developments since last October	21
Proposals for restructuring securities industry regulation	24
Response to written questions of Senator Proxmire	107
David S. Ruder, Chairman, Securities and Exchange Commission.....	26
Recommendations	41
Prepared statement	43
I. Introduction	43
II. Commission recommendations	43
III. Possible legislative initiatives	50
IV. Conclusion	54
Response to written questions of Senator Proxmire	108
Response to written questions of Senator Graham.....	112
Wendy L. Gramm, Chairman, Commodity Futures Trading Commission.....	56
Changes have been put in place.....	76
Prepared statement	78
Response to written questions of Senator Proxmire	117
Response to written questions of Senator Graham.....	144
Response to Senator Chafee's question	91
Panel discussion:	
White House working group	80
Legislation could be counterproductive	83
More changes needed.....	84
Market significantly lower	86
Deadline for report to President	88
Participation by individual investors	89
Circuit breakers.....	93
Reasons for delay of recommendations.....	96
Adding Secretary of the Treasury to working group	99
International cooperation	102

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

Statement of Sherwood H. Smith, Jr., Carolina Power and Light Co.	148
SEC recommendations set forth in the Division of Market Regulations	27
Commodity Futures Trading Commission, views on possible legislative initiatives.....	57

LEGISLATIVE RECOMMENDATIONS CONCERN- ING THE STOCK MARKET BREAK OF OCTO- BER 19, 1987

THURSDAY, MARCH 31, 1988

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10 a.m., in room SD-538, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Riegle, Sarbanes, Dixon, Sanford, Graham, Garn, Heinz, D'Amato, Hecht, Gramm, Bond, and Chafee.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

Today we will hear from the Chairmen of the Federal Reserve Board, the Commodities Futures Trading Commission, and the Securities and Exchange Commission.

The Presidential Task Force on Market Mechanisms, the Brady Commission, originally submitted its report on January 8, 1988. It contained a number of excellent recommendations. On February 2 and 3, we asked the three independent regulatory agencies to respond to those recommendations.

At those hearings we were promised specific legislative proposals by the Fed and the SEC by March 4. This hearing was scheduled to review those proposals.

In the interim, the White House announced by Executive order on March 18 it was forming a working group on financial markets. This group is to submit a progress report to the President on May 19.

Meanwhile, the Federal Reserve and the SEC have compromised their independence by reneging on their pledge to submit to us their separate proposals by March 4. I hope I am wrong, but it is difficult not to conclude that the administration is attempting to run out the clock on these issues.

It would appear that the White House is ignoring its own Presidential Commission report, that it wants no legislation whatsoever on market reform. Otherwise, the independent regulatory agencies, together with the administration, is simply incapable of devising any plan whatsoever for better coordinating our markets on a timely basis. In that event, Congress should act.

To add focus to these hearings, I've asked our witnesses to comment on the Intermarket Coordination Act of 1988 which I plan to

introduce later today, together with Senators Riegle, Chafee, Bond, Domenici, Stevens, and Dodd.

The witnesses have received an advance copy of the bill. I do not subscribe to a do-nothing approach. Basically, this legislation is a far more modest proposal than the Brady Commission recommendations. What it does, however, is establish a crisis management mechanism and an accountability function so that the next time we have an October 19 and 20 market mechanism failure someone will be held directly accountable.

The last time around Treasury could point to the Fed, it could point to the CFTC, it could point to the SEC, it could point to the self-regulatory organizations, and round and round we would go.

The Intermarket Coordination Act requires that the Fed, the SEC, the CFTC coordinate policy. Specifically, this Intermarket Coordination Committee is directed to promptly establish: (1) improved intermarket coordination of clearing and settlement systems; (2) information systems adequate for market surveillance and enforcement needs; (3) coordinate contingency planning for market emergencies; (4) effective methods for detecting and prohibiting intermarket frontrunning as well as other trading improprieties; (5) circuitbreaker mechanisms that are coordinated across marketplaces to protect the market system; and (6) harmonize margin requirements across marketplaces to control excessive speculation and financial leverage.

With respect to margins, for example, it makes no sense whatsoever that the Federal Reserve Board should have margin authority over securities but no governmental agency whatsoever should have responsibility over overseeing margin requirements with respect to futures.

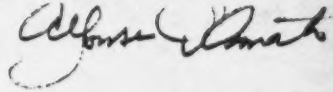
The committee is also directed to promptly initiate discussions with the appropriate regulators of financial institutions and financial markets in the major financial centers around the world for the purpose of: (1) enhancing the exchange of information relating to financial institutions and markets; and (2) coordinating regulatory activities with respect to those institutions and markets.

I look forward to the comments of our witnesses on this proposal and hope it provides new focus and momentum to these issues.

Senator D'Amato.

Senator D'AMATO. Mr. Chairman, rather than take the time of this committee, I would ask that I be permitted to submit my statement for the record as if read in its entirety. I'm certainly delighted to see Wendy Gramm here and Alan Greenspan and look forward to hearing their testimony.

[The committee will also insert statements of Senator D'Amato, Sasser, Sanford, and Chafee:]



STATEMENT OF SENATOR ALFONSE D'AMATO

MARCH 31, 1988

I WOULD LIKE TO PREFACE MY REMARKS THIS MORNING BY ESPECIALLY WELCOMING CHAIRPERSON GRAMM TO HER FIRST APPEARANCE BEFORE THIS COMMITTEE. SHE STARTS OUT WITH AT LEAST ONE MORE FRIEND ON THE COMMITTEE THAN OTHER WITNESSES. I WISH HER GREAT SUCCESS THIS MORNING AND THROUGHOUT HER TENURE CHAIRING THE CFTC.

IN FEBRUARY, THIS COMMITTEE CONDUCTED EXTENSIVE HEARINGS ON THE OCTOBER 19-20, 1987, MARKET CRASH. IN THE TESTIMONY WE RECEIVED FROM REGULATORS AND MARKET PARTICIPANTS, IT BECAME ABUNDANTLY CLEAR THAT THE CRASH WAS CAUSED BY A VARIETY OF ECONOMIC FACTORS THAT WERE AND REMAIN UNRELATED TO TRADING STRATEGIES, HEDGING TECHNIQUES, THE SPECIALIST SYSTEM OF THE NEW YORK STOCK EXCHANGE, THE DIFFERENCE IN MARGIN REQUIREMENTS BETWEEN THE FUTURES AND EQUITIES MARKETS, OR THE SOMNAMBULANCE OF THE REGULATORS OF THESE MARKETS.

RATHER, THE STRAIN PUT ON OUR FINANCIAL MARKETS ON OCTOBER 19 AND 20 WERE SYMPTOMS AND NOT CAUSES OF THE MARKET DECLINE. IT IS ESSENTIAL THAT WE DIFFERENTIATE BETWEEN SYMPTOMS WHICH MAY HAVE AGGRAVATED OR ACCELERATED A MARKET

DECLINE, AND THE CAUSES OF THE MARKET DECLINE ITSELF WHEN WE CONSIDER LEGISLATIVE RESPONSES TO THE OCTOBER CRASH.

THE TESTIMONY RECEIVED IN FEBRUARY LEADS TO THE CONCLUSION THAT THE MARKET BREAK OF OCTOBER WAS CAUSED BY A DRAMATIC CHANGE IN INVESTOR CONFIDENCE. AS CHAIRMAN GRAMM NOTES IN HER TESTIMONY: "THE MERE FACT OF A REVERSAL OF INVESTOR ATTITUDES IS NOT EVIDENCE JUSTIFYING MAJOR LEGISLATIVE CHANGES." IN THIS QUOTE AND IN THE TESTIMONY OF CHAIRMEN GREENSPAN AND RUDER, THIS COMMITTEE SHOULD HEAR ECHOES OF THE TESTIMONY WE RECEIVED LAST FEBRUARY. TODAY AND AT THAT TIME, THE WITNESSES URGED THIS COMMITTEE AND THE CONGRESS IN GENERAL NOT TO OVERREACT. INTRUSIVE CONGRESSIONAL RESPONSES COULD ONLY FURTHER SHAKE A FRAGILE MARKET PSYCHE.

FURTHER, THEY URGED US TO PERMIT THEM TIME TO EXAMINE THE ENTIRE REGULATORY STRUCTURE AND PROBE FOR WEAKNESSES. SO FAR, TO OUR CREDIT, WE HAVE NOT TAKEN ANY PREMATURE LEGISLATIVE ACTION; AND TO THEIR CREDIT, THE REGULATORS, THE FUTURES AND SECURITIES INDUSTRIES AND THE ADMINISTRATION THROUGH THE WORKING GROUP ON FINANCIAL MARKETS HAVE BEGUN TO EXAMINE AND IMPLEMENT MEASURES TO STRENGTHEN THE REGULATORY FRAMEWORK OF OUR FINANCIAL MARKETS

AS PREDICTED DURING PREVIOUS HEARINGS, MANY OF THE PROBLEMS IN TRADING STRATEGIES THAT AROSE IN OCTOBER HAVE

PROVEN TO BE SELF-CORRECTING. INVESTORS ARE FAR MORE WARY OF STRATEGIES SUCH AS PORTFOLIO INSURANCE. FURTHER, THE MARKETS HAVE RECOVERED SOMEWHAT AS INVESTOR CONFIDENCE HAS SLOWLY BEEN REGAINED. AMPLE ECONOMIC EVIDENCE OF THESE TRENDS IS CONTAINED IN CHAIRMAN GREENSPAN'S TESTIMONY. THEREFORE, THE OVERWHELMING EVIDENCE PRESENTED TO THE COMMITTEE TO DATE ARGUES AGAINST THOSE WHO CITE THE OCTOBER CRASH IN SUPPORT OF THEIR CLAIMS THAT A FUNDAMENTAL RESTRUCTURING OF THE FEDERAL REGULATION OF THE SECURITIES AND FUTURES INDUSTRY IS NEEDED. WHILE A FINE-TUNING OF THE REGULATION OF THESE INDUSTRIES MAY BE IN ORDER, I DO NOT BELIEVE THE BENEFITS OF A MAJOR RESTRUCTURING WOULD OUTWEIGH THE UNCERTAINTY AND UNINTENDED CONSEQUENCES OF SUCH A RESTRUCTURING. THE STRUCTURE AND REGULATION OF THESE MARKETS HAS GRADUALLY EVOLVED OVER A LENGTHY PERIOD.

OUR MARKETS ARE THE SAFEST, SOUNDEST AND MOST EFFICIENT IN THE WORLD. IT WOULD BE A SHAME TO TAKE UNWARRANTED ACTIONS TO SHAKE INVESTOR CONFIDENCE AT THIS TIME. FROM THE SUBMITTED TESTIMONY, IT APPEARS THAT THIS MORNING'S WITNESSES SHARE MY POSITION ON THIS SUBJECT UNTIL THERE IS EVIDENCE TO THE CONTRARY, AND UNTIL THERE IS A SHOWING THAT THEY HAVE FAILED TO TAKE THE STEPS WHICH THEY AND THE OTHER MARKET PARTICIPANTS PROMISED TO UNDERTAKE LAST FEBRUARY, I FAIL TO SEE ANY NEED FOR ADDITIONAL LEGISLATION AT THIS TIME. CONGRESS HAS SUPPLIED AN AMPLE AND FLEXIBLE REGULATORY FRAMEWORK. THE REGULATORS AND MARKET PARTICIPANTS SHOULD TAKE ADVANTAGE OF THIS FRAMEWORK TO ADDRESS ANY STRUCTURAL WEAKNESSES. TO DO OTHERWISE WOULD CERTAINLY INVITE MORE LEGISLATION IN THE FUTURE.

THANK YOU, MR. CHAIRMAN.

STATEMENT OF SENATOR JIM SASSER, SENATE BANKING COMMITTEE, MARCH 31, 1988

MR. CHAIRMAN, THIS IS AN IMPORTANT HEARING. THE STOCK MARKET CRASH OF OCTOBER 19, 1987, LESS THAN SIX MONTHS AGO, STILL HANGS HEAVILY OVER THE MARKETS AND THE ECONOMY.

THERE IS A GREAT DEAL OF SKEPTICISM AMONG INVESTORS, ESPECIALLY SMALL INVESTORS, ABOUT THE EQUITY MARKETS. I CONTINUE TO HEAR FROM MY CONSTITUTENTS THAT CONGRESS SHOULD DO SOMETHING TO RESTORE PUBLIC CONFIDENCE. PEOPLE DON'T PERCEIVE THE STOCK MARKET AS A FAIR OR APPROPRIATE PLACE FOR THEM TO INVEST.

THIS IS NOT GOOD. THE EQUITY MARKETS ARE THE PRIMARY PLACE FOR COMPANIES TO RAISE CAPITAL, TO FINANCE GROWTH, TO CREATE JOBS. INDEED, CHAIRMAN GREENSPAN WILL TESTIFY THIS MORNING THAT CORPORATIONS ARE NOT RETURNING TO THE MARKETS TO RAISE CAPITAL SINCE THE CRASH, EVEN THOUGH THE MARKET HAS BECOME MUCH LESS VOLATILE.

THIS IS POTENTIALLY A VERY SERIOUS SITUATION. I UNDERSTAND THAT THERE IS A SIGNIFICANT FEELING AMONG THE REGULATORS THAT CONGRESS SHOULD NOT LEGISLATE. MR. CHAIRMAN, I ALSO UNDERSTAND THAT YOU ARE OF A DIFFERENT VIEW.

THIS COMMITTEE IS THUS FACED WITH AN IMPORTANT QUESTION. SHOULD WE LEAVE THIS TO THE REGULATORS AND THE EXCHANGES? OR SHOULD WE MOVE?

MR. CHAIRMAN, I WILL VENTURE TO SAY THAT THE COMMITTEE SHOULD MAKE A DECISION ON THIS QUICKLY. IF WE DECIDE NOT TO LEGISLATE WE MUST MONITOR VERY CAREFULLY WHAT THE REGULATORS AND THE EXCHANGES ARE DOING, SO THAT WE CAN BE SURE THAT THEY ARE ABOUT THE PROCESS OF RESTORING CONFIDENCE. THANK YOU.

GOING
^

OPENING STATEMENT OF SENATOR TERRY SANFORD
HEARING ON THE REGULATORS' RECOMMENDATIONS FOR LEGISLATION
DEALING WITH THE STOCK MARKET CRASH OF OCTOBER 19, 1987

MR. CHAIRMAN, I COMMEND YOU FOR CALLING FOR THIS HEARING AND WELCOME OUR DISTINGUISHED PANEL OF REGULATORS. I KNOW WE APPRECIATE THE TIME AND EFFORT EACH OF OUR WITNESSES HAS SPENT IN EXAMINING THE EVENTS SURROUNDING THE STOCK MARKET CRASH AND IN TRYING TO COME UP WITH RESPONSES THAT WILL PREVENT SUCH A CRASH FROM OCCURRING AGAIN.

AS WE HAVE REVIEWED ALL OF THE VARIOUS REPORTS AND STUDIES THAT HAVE BEEN SUBMITTED REGARDING THE CRASH AND EXAMINED ALL OF THE DATA ABOUT JUST WHAT HAPPENED ON OCTOBER 19 AND THE VERY FATEFUL DAY THAT FOLLOWED, I REMAIN IMPRESSED WITH THE BASIC CONCLUSION OF THE BRADY COMMISSION AND OTHER REPORTS--THAT OUR EQUITY, OPTIONS AND FUTURES MARKETS ARE INEXTRICABLY LINKED AND FUNCTION AS ONE MARKET. I AM CONCERNED THAT WE HAVE NOT TAKEN STRONG ENOUGH STEPS TO ACT ON THAT CONCLUSION BY BRINGING GREATER COORDINATION AND RATIONALITY TO THE REGULATION OF THIS SINGLE MARKET.

I REMAIN VERY CONCERNED THAT THE SMALL INVESTOR HAS LOST CONFIDENCE IN THE MARKET OR HAS FELT THAT OUR MARKET IS NO

LONGER A FAIR PLACE FOR THE SMALL INVESTORS. I THINK WE NEED INDICATIONS FROM OUR REGULATORS AND OUR SELF-REGULATORY ORGANIZATIONS THAT SIGNIFICANT STEPS HAVE BEEN TAKEN TO ENSURE THAT THE SMALL INVESTORS IS FAIRLY TREATED.

FINALLY, I SHARE THE SENTIMENT OF MANY WHO WERE DISAPPOINTED THAT WHEN WE ASKED EACH OF YOU TO SUBMIT YOUR LEGISLATIVE RECOMMENDATIONS TO US BY MARCH 4 AND YOU AGREED TO DO SO, THAT NO RECOMMENDATIONS WERE FORTHCOMING. THIS COMMITTEE WANTS TO WORK WITH YOU TO DEVELOP A POLICY THAT MAKES SENSE FOR ALL CONCERNED, BUT OUR JOB IS MADE MORE DIFFICULT BY YOUR FAILURE TO SUBMIT THE RECOMMENDATIONS THAT YOU HAD AGREED TO GIVE US.

I LOOK FORWARD TO DISCUSSING WITH YOU THIS MORNING YOUR SUGGESTIONS ON HOW WE CAN BETTER REGULATE OUR MARKET.

SPEECH BY
SENATOR JOHN H. CHAFEE
TO
SENATE BANKING COMMITTEE
ON REGULATORS' RECOMMENDATIONS ON LEGISLATION FOR STOCK MARKET
CRASH
(MARCH 31, 1988)

MR. CHAIRMAN. THANK YOU FOR CALLING THIS HEARING TODAY ON POSSIBLE LEGISLATIVE APPROACHES TO RESOLVE THE ISSUES BROUGHT TO LIGHT BY THE OCTOBER 19 MARKET CRASH.

I WELCOME THE APPOINTMENT OF THE PRESIDENTIAL WORKING GROUP ON FINANCIAL MARKETS. ITS 60 DAY TIMETABLE, TO COME TO A CONSENSUS OF WHAT STEPS CAN BE TAKEN TO HELP THE FINANCIAL MARKETS OPERATE MORE EFFECTIVELY TOGETHER, IS AMBITIOUS BUT FAIR. IF ITS REPORT IS AS EXPERT AS THAT OF THE BRADY COMMISSION, IT WILL HAVE PERFORMED VALUABLE WORK.

I HAVE AGREED TO CO-SPONSOR THE INTERMARKET COMMITTEE BILL FOR A SIMILAR REASON. CONSENSUS IN THESE MARKET QUESTIONS IS DIFFICULT BUT NECESSARY. LITTLE WILL BE RESOLVED UNLESS NEW YORK AND CHICAGO MOVE CLOSER TOGETHER ON THESE ISSUES. I AM THEREFORE PLEASED TO NOTE THE GREAT STRIDES THAT HAVE BEEN MADE, ESPECIALLY BY THE CHICAGO EXCHANGES.

THE CHICAGO BOARD OF TRADE AND THE CHICAGO MERCANTILE EXCHANGE HAVE STEPPED FORWARD ON THE ISSUES IN QUESTION. ON CIRCUIT

BREAKERS, THEY HAVE IMPLEMENTED PERMANENT TRADING HALTS THAT WOULD BE EFFECTIVELY TRIGGERED WERE THE DOW JONES INDUSTRIAL AVERAGE TO MOVE MORE THAN 100 POINTS. WITH REGARD TO BETTER INFORMATION FLOW, THEY HAVE SOUGHT ENTRY AND BEEN ADMITTED TO THE INTERMARKET SURVEILLANCE GROUP, WHICH NOW COVERS EQUITIES, OPTIONS AND FUTURES. WITH REGARD TO CLEARING AND SETTLEMENT SYSTEMS, THEY HAVE HELPED COORDINATE THE DIFFERENT FUTURES AND OPTIONS MARKETS TO MORE READILY KNOW THE DIFFERENT POSITIONS HELD AT ANY PARTICULAR TIME. WITH REGARD TO MARGINS, THEY HAVE RAISED INITIAL MARGINS ON SPECULATIVE FUTURES TRADING TO A LEVEL OF ABOUT 15%.

THE NEW YORK STOCK EXCHANGE, IN TURN, IS GREATLY IMPROVING THE VOLUME CAPACITY OF ITS DOT (DESIGNATED ORDER TURNAROUND) SYSTEM. IT IS REVIEWING ITS SPECIALIST SYSTEM WITH REGARD TO BOTH PERFORMANCE AND CAPITAL ADEQUACY. IT HAS INSTITUTED THE REMOVAL OF USE OF SUPER DOT FOR INDEX ARBITRAGE PURPOSES WHEN THE DOW MOVES MORE THAN 50 POINTS. THE OTHER STOCK EXCHANGES ARE ALSO TAKING STEPS TO IMPROVE THEIR OPERATIONS.

THIS IS SIGNIFICANT PROGRESS, AND CONSISTENT WITH THE STATED DESIRES OF THESE SELF-REGULATORY ORGANIZATIONS TO FOSTER CONSTRUCTIVE CHANGE ONCE EACH HAD FULLY REVIEWED THE FACTS FROM THE MARKET CRASH. THIS EFFORT OF REVIEW AND INCREMENTAL IMPROVEMENT SHOULD CONTINUE. I HOPE CREATION OF THE INTERMARKET COMMITTEE COULD PROMPT THAT.

LET ME ALSO STATE VERY CLEARLY THAT I IN NO WAY SEE THIS INTERMARKET COMMITTEE FORCING UNACCEPTABLE SOLUTIONS DOWN THE

THROAT OF ANY OF ITS THREE MEMBERS. CONSENSUS IS THE MOST EFFECTIVE APPROACH FOR CONTINUED PROGRESS.

ALSO IT SHOULD BE NOTED THAT CHAIRMAN GREENSPAN WAS VERY SUCCESSFUL WITH HIS SOCIAL SECURITY COMMITTEE. I FEEL IT IS ONLY FITTING THAT HE SHOULD HAVE ANOTHER OPPORTUNITY TO WORK HIS ALCHEMY.

Today's Presentations-
I LOOK FORWARD TO ~~THE SPEECHES TODAY.~~

The CHAIRMAN. Thank you, Senator D'Amato.

Senator Dixon.

Senator DIXON. Mr. Chairman, in the interest of time I won't read my entire statement, but I just want to say I'm delighted to see these distinguished witnesses here and to say to the chair and my colleagues on this committee that my information is that the industry is doing all it can in a cooperative effort to work together, both on margin requirements, circuit-breakers, general communication within the industry on this problem, and with respect to all this communication with the regulators, and I'm delighted to hear that these efforts are being made and, Mr. Chairman, I really feel very strongly that we ought to wait until after May 18 until we hear what Secretary of the Treasury Jim Baker and others say about all of these different deliberations that have taken place in committees and by a number of investigating agencies, and in the marketplace, and I'm delighted to hear these witnesses this morning and if I can't all the time the chair will understand I'm on the conference committee that he just left on the Toshiba question and a lot of other export-import problems and I may have to leave in a while.

Thank you, Mr. Chairman.

The Chairman. Well, thank you very much, Senator Dixon, and we're going to miss you if you leave. If you have to go, you have to go, and that's a very important committee meeting. I say that because you and I disagree very strongly on what we're going to hear this morning.

Senator DIXON. Don't you think we ought to work together?

The CHAIRMAN. After all, we've waited 5 months. We've done nothing. The worst crash we've had in the history of our country and it seems to me it's time for us to act.

Now, Chairman Greenspan, you go ahead and tell us what you think.

Senator DIXON. Mr. Chairman, I just wanted to say we did pretty well. We worked together yesterday, 92 to 4 was a pretty good result.

The CHAIRMAN. And you made the best speech of your life last night on the floor of the Senate. [Laughter.]

[Committee insert of Senator Dixon's opening statement.]



MARCH 31, 1988

STATEMENT OF SENATOR ALAN DIXON

SENATE BANKING COMMITTEE HEARING
ON
THE REGULATORS' RECOMMENDATIONS FOR LEGISLATION
DEALING WITH THE STOCK MARKET BREAK

I WOULD LIKE TO WELCOME OUR DISTINGUISHED GUESTS THIS MORNING. I THANK THE CHAIRMAN FOR CALLING THIS HEARING AND PROVIDING THE COMMITTEE WITH THE OPPORTUNITY TO HEAR AN UPDATE ON THE ACTIONS TAKEN BY THE AGENCIES AND MARKETS SINCE THIS COMMITTEES EARLY FEBRUARY HEARINGS ON THE OCTOBER BREAK.

I AM ESPECIALLY PLEASED TO HEAR THE PROGRESS THAT HAS OCCURRED SINCE THAT TIME WITHOUT CONGRESSIONAL ACTION. IT IS IMPORTANT THAT THE MARKETS, THE SEC, THE CFTC AND THE FEDERAL RESERVE ALL WORK TOGETHER TO FIND SOLUTIONS TO PREVENT A RECURRENCE OF LAST OCTOBER.

SINCE THE FEBRUARY HEARINGS, ALL THE RECOMMENDATIONS OF THE BRADY COMMISSION HAVE BEEN DISCUSSED AND ACTION HAS BEEN TAKEN ON THEM BY THE SEC, CFTC AND THE EXCHANGES.

CIRCUIT BREAKERS HAVE BEEN IMPLEMENTED ON EACH EXCHANGE. THE CHICAGO MERCANTILE HAS INSTITUTED A SYSTEM BY WHICH TRADING WILL HALT IF THE MARKET MOVES THE EQUIVALENT OF 100 DOW POINTS. THE CHICAGO BOARD OF TRADE HAS INSTITUTED A SIMILAR CIRCUIT BREAKER. THE NEW YORK STOCK EXCHANGE HAS TAKEN A DIFFERENT APPROACH, BUT STILL ONE THAT WILL SLOW TRADING IN THE CASE OF A MARKET BREAKDOWN. IF THE DOW MOVES MORE THAN 50 POINTS THE EXCHANGE WILL SHUTDOWN ITS SUPERDOT COMPUTER SYSTEM. PRESUMABLY, WITH THESE LIMITS IN PLACE, A FALL OF 500 POINTS WILL NOT BE REPEATED.

IN THE AREA OF BETTER COORDINATION THE EXCHANGES AND MARKETS HAVE BEEN MEETING ON A REGULAR BASIS SINCE FEBRUARY, BEGINNING WITH A MEETING IN CHAIRMAN RUDER'S OFFICE IMMEDIATELY FOLLOWING THE FEBRUARY HEARINGS. THESE MEETINGS ARE WHAT IS NEEDED. IT IS THE EXCHANGES THEMSELVES, ALONG

WITH THE AGENCIES, WHICH HAVE THE GREATEST INTEREST IN SEEING A PREVENTION OF LAST OCTOBER. AS LONG AS THEY CONTINUE TO COMMUNICATE, OCTOBER WILL NOT BE REPEATED.

BECAUSE OF THE IMPROVED COMMUNICATION NETWORK, THE SHARING OF INFORMATION IS OCCURRING ON A REGULAR BASIS. THE FUTURES MARKETS WERE INVITED TO JOIN THE INTERMARKET SURVEILLANCE GROUP (ISG) IN FEBRUARY. BOTH THE CHICAGO MERCANTILE AND THE CHICAGO BOARD OF TRADE HAVE ACCEPTED THE INVITATION AND ARE AN ACTIVE PART OF A FORUM FOR THE EXCHANGING OF INFORMATION.

ON THE ISSUES OF MARGINS, ACTION HAS ALSO OCCURRED. INITIAL MARGINS FOR BOTH SIDES OF THE CONTRACT ON THE CHICAGO MERCANTILE ARE NOW 15%. LET US NOT FORGET THAT THE MARGINS IN THE FUTURES MARKETS ARE FUNDAMENTALLY DIFFERENT FROM THOSE ON THE NEW YORK STOCK EXCHANGE SINCE THEY MUST BE MET EACH DAY, THE MARK TO MARKET SYSTEM.

COORDINATION HAS ALSO TAKEN PLACE IN THE CLEARING HOUSE AREA. NEW AGREEMENTS FOR SHARING INFORMATION ARE IN PLACE

BETWEEN ALL FUTURES AND OPTIONS EXCHANGES. IN ADDITION, NEGOTIATIONS ARE TAKING PLACE WITH THE NEW YORK STOCK EXCHANGE FOR INCLUSION IN SUCH AN INFORMATION SHARING SYSTEM..

EVERY CONCEIVABLE EFFORT IS BEING MADE TO ARRIVE AT AN UNDERSTANDING ABOUT WHAT SHOULD BE DONE. A PROFOUND ERROR WILL BE MADE BY THIS COMMITTEE IF WE ACT HASTILY, WITHOUT HAVING A CONSENSUS IN THE MARKETPLACE BY THE REGULATORS AND THE PEOPLE OUT THERE SERVING THE PUBLIC IN THE MARKETPLACE.

IT IS POSSIBLE TO REACH A CONSENSUS THROUGH THE CURRENT STRUCTURE. THE PRESIDENT HAS ASKED US TO WAIT UNTIL MAY 18TH IN ORDER TO ACHIEVE AN UNDERSTANDING AMONG THOSE IN THE MARKETPLACE AND THE REGULATORS ABOUT WHAT THE RESPONSE SHOULD BE, AND I SAY THAT IS A RESPONSIBLE APPROACH. PROGRESS IS BEING MADE. WITH THE HELP OF THE PRESIDENT'S GROUP TO INFORM US OF WHAT INTERMARKET ISSUES ARE LEFT TO BE DEALT WITH, THE COMMITTEE WILL BE IN MUCH BETTER SHAPE ON MAY 18TH TO EVALUATE THE CONDITION OF THE MARKETS AND MAKE A DECISION ON WHETHER ANY LEGISLATION IS REQUIRED.

The CHAIRMAN. Chairman Greenspan, go right ahead.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Mr. GREENSPAN. Well, I must say I don't know whether it is appropriate for the Federal Reserve Board to compliment the Senate Banking Committee on last night's vote, but we do.

The CHAIRMAN. I appreciate that very much.

Mr. GREENSPAN. Mr. Chairman, I'd like to excerpt from my written remarks and ask that the full statement be included for the record.

The CHAIRMAN. It will be printed in full in the record.

Mr. GREENSPAN. Mr. Chairman, I appreciate the opportunity to appear once again before the Banking Committee today to discuss initiatives to strengthen financial markets in response to the events of last October. I know that there is some developing impatience in the Congress with respect to the speed with which progress has been made in formulating proposals to deal with the questions raised by the October market crash. Let me say initially, though, that while the various reports that have analyzed the crash are extremely helpful, they are limited in addressing some very complex matters. We are caught in the dilemma of concern that latent structural defects will not be quickly addressed and hence, under a repeat of circumstances of last October, similar outcomes would obtain. Yet there is a pervasive and legitimate sense that acting hastily could inadvertently destabilize the markets, creating the very type of episode we are endeavoring to avoid.

RESTRUCTURING OF FEDERAL REGULATION

There are, in my judgment, two criteria that any restructuring of Federal regulation of the securities industry should satisfy. First, restructuring should allow for the continued evolution of financial markets. The regulatory structure should be appropriate not only to the world as we know it today, but, if possible, to that likely to exist in say 1995 and beyond. In particular, the structure must be appropriate in an environment in which cross-border financial activity is even more important than it is today. We also need to frame our regulatory system to deal with the structure of financial organizations—a particularly important issue today, with repeal of Glass-Steagall on the table. And we need to address the issues of the comparative virtues of, and the possible melding of, functional regulation and oversight of consolidated entities. The Congress may decide that partial adjustments may nonetheless be appropriate. But it should do so with the understanding that further restructuring requirements do remain on the table.

Second, restructuring should be carefully designed to avoid adversely affecting the efficiency of existing agencies. I am concerned that some recent proposals for restructuring may not satisfy this criterion. For example, the proposed Intermarket Coordination Act of 1988 seeks to address intermarket issues by forming a committee composed of the Chairmen of the CFTC, the SEC, and the Federal Reserve. This committee is intended to serve as a forum for regulatory cooperation on circuit breakers, margins, contingency plan-

ning, information collection, clearance and settlement, and so forth. However, the prospect of such a committee raises several questions that need to be considered carefully. A particularly thorny issue concerns the role of the Board members and Commissioners, other than the Chairmen, of the constituent agencies. It is not hard to imagine a situation in which these individuals have differing positions from their Chairmen. Their ability to affect decisions of the Intermarket Committee might be limited, yet they could be asked to implement these decisions and perhaps placed in ambiguous legal positions. Another question to be resolved concerns the scope of authority of the Intermarket Committee. By nature, intermarket issues cut across the interests and policies of existing regulatory bodies. Some mechanism will have to be devised for appropriately delimiting the Intermarket Committee's powers, lest the burden of the committee becomes too great or the existing regulatory bodies become redundant.

Answers to many of the questions I have posed may be suggested by our experience with the Presidential Working Group on Financial Markets. This group should provide a forum for addressing concerns outlined in the proposed Intermarket Coordination Act, and it should indicate the feasibility of such an approach to regulatory issues that cut across markets. I am optimistic that members of the group will work closely with each other and with the private sector to achieve the goals stated by the President. It would seem appropriate to attempt first to solve our problems in the context of the existing regulatory framework. Nonetheless, it is quite possible that efforts of the group will reveal a need for some legislative changes. In the Federal Reserve Board's view, however, specific legislative proposals mandating a new regulatory structure appear premature.

Market participants have already taken some useful steps. At the same time, the Working Group has begun the task of producing a report, including any necessary recommendations for legislation, within the 60-day deadline imposed by the President.

Thank you again for this opportunity to address these very complex and important issues.

[The complete prepared statement of Alan Greenspan follows:]

Statement by
Alan Greenspan

Chairman, Board of Governors of the Federal Reserve System

Mr. Chairman, I appreciate the opportunity to appear once again before the Banking Committee, today to discuss initiatives to strengthen financial markets in response to the events of last October. I know that there is some developing impatience in the Congress with respect to the speed with which progress has been made in formulating proposals to deal with the questions raised by the October market crash. Let me say initially, though, that while the various reports that have analyzed the crash are extremely helpful, they are limited in addressing some very complex matters. We are caught in the dilemma of concern that latent structural defects will not be quickly addressed and hence, under a repeat of circumstances of last October, similar outcomes would obtain. Yet there is a pervasive and legitimate sense that acting hastily could inadvertently destabilize the markets, creating the very type of episode we are endeavoring to avoid.

Before taking actions, it is essential that we have as clear an understanding as possible of what happened last October, and why. Only when we have identified the structural problems that contributed to the severity and rapidity of the market break can we judge whether or not various proposed actions in fact address those problems. We must carefully distinguish those problems that are self-

-2-

correcting, or can be addressed within existing regulatory frameworks, from those that will require more fundamental, perhaps legislative, solutions.

As I indicated in my testimony before this committee on February 2, I believe the severity and rapidity of the plunge on October 19th was, in a sense, the outcome of a confrontation between dramatically changing computer and telecommunications technology and unchanging human nature. The new technology has enabled market participants around the world to respond almost instantaneously both to changing external events and to the internal price dynamics of stock and derivative-products markets. In a market of rapid and large price movements, heightened uncertainty and fear leads people to pull back--to disengage, to withdraw from, or avoid, commitments. Where the consolidated positions of all market participants are net long, such as in equities, disengagement means net sales, and hence lower prices.

On October 19th and immediately thereafter, one could observe the interaction between technology and human nature quite clearly: the news of sharply falling stock prices, communicated instantly to a sensitive investment community, triggered an avalanche of sell orders on both futures and stock exchanges. The overloading of the execution systems then induced breakdowns that dramatically further increased

The CHAIRMAN. Thank you, Chairman Greenspan.
Chairman Ruder.

**STATEMENT OF DAVID S. RUDER, CHAIRMAN, SECURITIES AND
EXCHANGE COMMISSION**

Mr. RUDER. Thank you, Chairman Proxmire and members of the committee, for inviting me to testify today. I have submitted written testimony to the committee and ask that it be made a part of the record.

The CHAIRMAN. Without objection, it will be printed in full in the record.

Mr. RUDER. A March 4, 1988 memorandum to me from my Director of the Division of Market Regulation regarding implementation of the staff's market break recommendations has previously been transmitted to members of the committee. I ask that the March 4 memorandum also be made part of the record.

The CHAIRMAN. Without objection, that will be done.

[Committee insert of March 4, 1988 memorandum follows:]

uncertainty among investors, which in turn accelerated the bunching of sell orders.

Prior to the availability of sophisticated telecommunications, it took hours, sometimes days, for the news of a price decline to be transmitted to all market participants. This allowed the self-feeding dynamics of falling prices to be stretched out over a longer time period, reducing the shock effect of an unexpected price decline and softening some of its secondary consequences.

To a significant degree, the uncertainties following the crash of last October reflected increasing concerns about the solvency of the participants in the markets, including, in particular, the various clearinghouses. The extraordinary discount of prices of stock-index futures relative to prices of stocks indicates an unwillingness on the part of arbitrageurs to buy futures and sell stocks. Doubts about the ability to execute trades at reported prices may have contributed to this unwillingness. In addition, however, many arbitrageurs evidently feared that potential profits would not be realized because of defaults by one or more participants in the complex clearing and settlement systems for stocks and stock-index futures.

This points clearly to the need to create real-time information systems for monitoring credit exposures that arise from stock trading and, most importantly, to

strengthen the financial position of participants in the clearing and settlement process so that arbitrage will not be inhibited. Specifically, there is no substitute for ample capital to allay fears of potential insolvency of the principals on the other side of a contemplated trade.

Financial Developments Since Last October

The immediate uncertainty and fear that surrounded us in mid-October have eased. The passage of time has provided us the opportunity to assess developments in securities markets and the reactions of the private sector to the lessons of Black Monday. As a result, it is becoming possible to distinguish better the self-correcting problems from those that will require more fundamental changes in financial markets.

Our economy has not fallen into recession, as some had predicted; indeed it has shown considerable resilience. This, of course, has had a positive effect on attitudes of investors in private securities. The volatility in securities prices has moderated, and the premia that investors require in yields on private sector debt above yields on Treasury debt have narrowed from the wide levels that developed immediately following the stock market plunge. This improvement has been most noticeable in the short-term markets for bank CDs and commercial paper, but it also has been apparent in longer-term corporate markets.

Even the market for low-rated corporate debt has rebounded. Current risk premia on such bonds average roughly 4-1/2 percentage points above Treasuries, a range that is well below the 6 to 7 points observed in the weeks immediately after the crash. As these interest rate spreads have narrowed, new issues of low-rated companies have reappeared in the public bond market, along with those of higher-rated firms.

Although investor fears have receded, securities markets--especially equity-related markets--still retain the imprints of the October shock. Corporations have not returned to equity markets to raise capital, despite the reduction in stock price volatility. The volume of new stock issued by nonfinancial firms in January and February was the lowest total for these two months in almost a decade.

Activity in stock-index futures and options markets also has been reduced. Trading in the S&P futures contract recently has been 30 percent or more below average daily volumes in pre-crash months. Although the financial integrity of these markets was maintained during the crisis, many participants sustained large losses or experienced close calls. Investors engaged in trading stock-index products appear to have adopted a more cautious attitude since the crash.

One area where greater caution has been especially evident is in sharply reduced reliance on portfolio insurance strategies. The use of portfolio insurance by large institutional investors is thought by many to have contributed both to the high level of share prices reached in late summer and to the heavy selling pressures in mid-October. These strategies presume a high degree of market liquidity and quick execution of purchase or sale orders near prevailing prices. October demonstrated clearly that such liquidity will not be there in extreme situations. As a result, the use of portfolio insurance reportedly has been scaled back dramatically. Unless memories prove exceptionally short, this is one problem, if it is one, that should be self-correcting. I suspect--though I cannot prove--that the October experience has had similar effects on the attitudes of investors about the degree to which they can lock in gains by using stop loss or limit orders, whose execution can have the same effects on the markets.

Meanwhile, the futures and options exchanges have acted to reduce their risk exposure in the event of large price moves. Several exchanges have expanded their use of intra-day margin calls and the major exchanges now have in place procedures to pay out intra-day margins, thereby limiting one source of liquidity pressures evident last fall. Most importantly, virtually all the exchanges have raised the

margin levels applicable to stock-index futures and options. Although margin levels for these derivative products remain significantly below margin levels in the cash markets for equities, they may now generally provide clearinghouses and other lenders with roughly comparable protection against credit losses stemming from adverse price movements. Lower margins on futures can provide equal protection because margin payments are required much more frequently than in the cash markets and because stock index prices tend to be less volatile than prices of individual stocks.

The regulation of margins clearly is a controversial issue: Some industry experts, federal regulators, and members of Congress have, of course, made quite different recommendations for reform. This lack of consensus appears primarily to reflect differences in objectives. Most agree that margins should be, at a minimum, sufficient to ensure the integrity of the markets by limiting credit exposures of clearinghouses and of brokers, banks and other lenders to whom the clearinghouses are directly or indirectly exposed. But there is much disagreement about the need for, or effectiveness of, higher margins to control speculation and limit stock price volatility. If margins are deemed important to control leveraged speculation, this implies a much different structure for the levels and consistency of margin requirements across markets than if the objective is

simply protection of the market. The appropriate objective of margin regulation is an issue that needs to be considered carefully before any regulatory reforms are implemented.

The steps taken to strengthen margins, as well as other steps under active consideration, are indications of the serious and widespread effort by the private sector to identify and correct weaknesses. As a general principle, it is in the self-interest of the exchanges and associations of market makers to protect and enhance the integrity of their markets. They also have superior knowledge of their own markets. Thus, we should rely where possible on the private organizations to correct the problems that were evident last October.

However, there are some areas where independent actions by private organizations may be counter-productive and where vehicles for desired joint action do not exist. In this regard, I would suggest that the unilateral efforts we have seen to impose circuit breakers, for example, pose potential problems. The recent studies underscore that stocks and stock-index futures and options products are all components of what is effectively one market valuation system. Such linkage implies the need for a regulatory approach on intermarket issues that is coordinated across markets. Prices limits in futures markets, if they become binding, will tend to push traders and investors to the cash market

unless similar restraints are in force there. Likewise, trading halts in the cash markets may impair the ability to carry on hedging strategies in derivative markets and derail arbitrage activities.

In a similar manner, markets for equity-related products are linked across countries. Many large financial intermediaries operate across several national markets, and in some instances, their ownership is international. Shares of large American firms often are listed on foreign exchanges, and foreign firms are listed on ours. Indeed many of the world's larger companies trade on a near 24-hour basis on exchanges around the world. Trading hours on domestic markets have been extended to overlap with activity in other time zones, and some exchanges have established formal trading links. At every step, communications systems have facilitated these developments. The forces moving us in the direction of further domestic and international market integration are irresistible. Coping with such change may be challenging, but we should view the process as offering the opportunity for better economic performance here and abroad.

Proposals for Restructuring Securities Industry Regulation

Many people have already concluded that the events of last October reveal a need for fundamental restructuring of federal regulation of the securities industry. I believe

that we need to proceed cautiously in this area. There are two criteria that any such restructuring should satisfy. First, restructuring should allow for the continued evolution of financial markets. The regulatory structure should be appropriate not only to the world as we know it today, but, if possible, to that likely to exist in say 1995 and beyond. In particular, the structure must be appropriate in an environment in which cross-border financial activity is even more important than it is today. We also need to frame our regulatory system to deal with the structure of financial organizations--a particularly important issue today, with repeal of Glass-Steagall on the table. And we need to address the issues of the comparative virtues of, and the possible melding of, functional regulation and oversight of consolidated entities. The Congress may decide that partial adjustments may nonetheless be appropriate. But it should do so with the understanding that further restructuring requirements remain on the table.

Second, restructuring should be carefully designed to avoid adversely affecting the efficiency of existing agencies. I am concerned that some existing proposals for restructuring may not satisfy this criterion. For example, the proposed Intermarket Coordination Act of 1988 seeks to address intermarket issues by forming a committee composed of the Chairmen of the Commodity Futures Trading Commission,

the Securities and Exchange Commission, and the Federal Reserve Board. This committee is intended to serve as a forum for regulatory cooperation on circuit breakers, margins, contingency planning, information collection, clearance and settlement, and so forth. However, the prospect of such a committee raises several questions that need to be considered carefully. A particularly thorny issue concerns the role of the board members and commissioners, other than the chairmen, of the constituent agencies. It is not hard to imagine a situation in which these individuals have differing positions from their chairman. Their ability to affect decisions of the Intermarket Committee might be limited, yet they could be asked to implement these decisions and perhaps placed in ambiguous legal positions. Another question to be resolved concerns the scope of authority of the Intermarket Committee. By nature, intermarket issues cut across the interests and policies of existing regulatory bodies. Some mechanism will have to be devised for appropriately delimiting the Intermarket Committee's powers, lest the burden of the committee becomes too great or the existing regulatory bodies become redundant.

Answers to many of the questions I have posed may be suggested by our experience with the Presidential Working Group on Financial Markets. This group should provide a

forum for addressing concerns outlined in the proposed Intermarket Coordination Act, and it should indicate the feasibility of such an approach to regulatory issues that cut across markets. I am optimistic that members of the Group will work closely with each other and with the private sector to achieve the goals stated by the President. It would seem appropriate to attempt first to solve our problems in the context of the existing regulatory framework. Nonetheless, it is quite possible that efforts of the Group will reveal a need for some legislative changes. In the Board's view, however, specific legislative proposals mandating a new regulatory structure appear premature.

Once again, let me stress that I sympathize with the concerns of the Congress at the slow pace at which a clear legislative agenda is developing. As I have pointed out, however, market participants have already taken some useful steps. At the same time, the Working Group has begun the task of producing a report, including any necessary recommendations for legislation, within the 60-day deadline imposed by the President.

Thank you again for this opportunity to discuss these very complex and important issues.



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 4, 1988

The Honorable William Proxmire
Chairman
Committee on Banking, Housing, and
Urban Affairs
Washington, DC 20510

Dear Chairman Proxmire:

In my testimony on February 3, 1988, on the October market break, I promised to report back to your committee on developments in response to the recommendations set forth in the Division of Market Regulation's October 1987 Market Break Report ("Report") and in the Commission's February 3, 1988 written testimony before the Senate Committee on Banking, Housing, and Urban Affairs.

The Commission staff has been closely monitoring the self-regulatory organizations ("SROs") to ensure that steps are being taken to implement the Division's and the Commission's recommendations. The enclosed Implementation Memorandum from Richard G. Ketchum, Director of the Division of Market Regulation, summarizes the responses and actions that have been taken by the SROs to date on the recommendations. I note that in two areas of particular concern, contingency planning and the expansion of operational capacity, significant progress has been made since my testimony.

As detailed in the enclosed Implementation Memorandum, important steps have been taken by the SROs to develop contingency plans for market emergencies. In addition, as detailed in the Implementation Memorandum, considerable progress has been made by the SROs in upgrading systems and increasing order handling and execution capacity.

In addition, I am pleased to note that the Commission has commenced steps to ensure coordination of relevant federal agencies during a market emergency. I have been personally involved in meetings with the Chairman of the Commodity Futures Trading Commission ("CFTC") and the Board of Governors of the Federal Reserve Board ("FRB"). As a result of these meetings, senior staff members of the three agencies have been assigned the task of developing a comprehensive contingency plan.

Please note as well that the Commission is continuing to monitor SRO developments in response to the Division's and the Commission's recommendations. We will continue to work diligently on coordinating contingency plans between the SEC,

The Honorable William Proxmire
Page 2

CFTC, and FRB, in addition to encouraging increased cooperation among all the SROs. In addition, we will continue discussions with the SROs as to the remaining areas of concern.

In the area of international cooperation, please also note that during the week of February 26, 1988, I travelled to Japan and met with representatives of the Ministry of Finance, the Securities Bureau, and the Tokyo Stock Exchange for the purpose of facilitating exchange of information regarding the international securities markets. During the week of March 6, I will be in Great Britain for the purpose of meeting with British securities officials.

The Commission intends to review possible legislative responses to the market break and we will communicate our conclusions to you within two weeks.

Sincerely yours,

David S. Ruder
David S. Ruder
Chairman

Enclosure



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20540

MEMORANDUM

March 4, 1988

TO: Chairman Ruder

FROM: Richard G. Ketchum, Director
Division of Market Regulation

RE: Implementation of the Division's and the Commission's
Recommendations regarding the October Market Break

This memorandum summarizes self-regulatory organization ("SRO") actions to date in response to recommendations in the Division of Market Regulation report, The October 1987 Market Break ("Report") and the Commission's recommendations as contained in your February testimony before the Senate Committee on Banking, Housing and Urban Affairs. These recommendations concerned, among other things, contingency planning, operational capacity, specialist or market making performance, and capital adequacy.

In light of our monitoring and oversight responsibilities, the Division recently requested that the various markets inform us of their efforts to implement these recommendations. The following summaries describe the areas in which the markets have made substantial progress or reached a common understanding. As the following summaries indicate, significant action has been taken among the markets in some areas, particularly regarding contingency planning and coordination and operational capacity and enhancements. Although we are supportive of the SROs efforts to date to respond to our recommendations, we believe that the SROs must continue to devote their time to analyzing the recommendations and taking appropriate action. In addition, the SROs are continuing to discuss the broader market issues raised in the Division's Report and the Commission's testimony.

The following discussion first sets forth the recommendation and then each market's response.

I. Contingency Planning and Information Sharing Among the SROs

All the markets support the need to develop better intermarket cooperation in some form. The following list sets forth the recent initiatives that have taken place to develop contingency plans for a market emergency.

- On January 11, heads of the SROs met at the New York Stock Exchange ("NYSE") to discuss methods of improving communications.
- On February 10, heads of the Chicago Mercantile Exchange ("CME") and NYSE met with Chairman Ruder of the SEC, and Acting Chairman Hineman of the CFTC.
- On February 24, all exchanges, including equity, options, and futures markets, met in New York to consider various issues in cooperation and sharing of information.
- On March 16, all exchanges, including equity, options, and futures markets, the Commission, and the CFTC, will meet to discuss issues relating to inter-exchange coordination and information sharing.

In addition to these joint efforts several independent initiatives have been made by some exchanges. For example, the NYSE has established an Operations Advisory Committee that meets several times each week. The immediate objective of the Committee is to ensure that the NYSE and the industry can function effectively on the next 600 million share day. The NYSE has indicated that the Committee's intermediate goal is to be prepared for the first billion share day by 1989. The Pacific Stock Exchange ("PSE") has also established a Contingency Planning Task Force. The Task Force's primary objective is to improve both internal and external communications when a market disruption occurs. This includes formalizing internal procedures to communicate effectively within the staff and with other markets, the SEC, members and public customers, the news media and the general public. The PSE also is sponsoring a meeting with the other regional markets on March 28 to discuss, among other things, specialist capital requirements, intermarket trading systems performance, communication linkages and contingency planning for market emergencies.

II. Stock Exchanges

A. Specialist Performance

1. The NYSE should develop relative, objective standards for evaluating specialist performance.

The NYSE has proposed to add specific objective standards to measure specialist performance in a variety of areas. This will supplement their current specialist evaluation system, which bases performance on specialist evaluation questionnaires ("SPEQ") filled out quarterly by floor brokers. The Commission staff is currently reviewing this proposal. As detailed in Chapter 4 of the Report, the NYSE has been particularly reluctant

to adopt relative performance measures so that specialists who were regularly among the lowest ranked specialists would be subject to performance reviews. 1/ While the NYSE continues to believe relative standards raise difficult issues, it has agreed to review the feasibility and desirability of developing relative measures of performance.

2. The SROs should examine individual specialist performance during the market break and, where appropriate, bring disciplinary actions or reallocation proceedings to remedy poor specialist performance during the market break.

To date NYSE investigations into specialist performance during the market break have resulted in the reallocation of five stocks from four specialist units (the stocks are J.P. Morgan & Co., Gould, Inc., Neiman Marcus Group, E.F. Hutton Group, Inc., A.G. Edwards, Inc.), with an additional stock, Carter-Wallace, up for reallocation on March 10. (We note that A.G. Edwards was reallocated because the reallocation of E.F. Hutton Group would have less significance due to its imminent termination). The NYSE has indicated that it is continuing to review specialist activity during the October market break period, and is focusing particularly on those areas of concern outlined in the Division's Report such as proprietary activity during gap openings (opening at a price significantly away from the previous last sale), delayed openings, and trading halts.

The American Stock Exchange ("Amex") has examined trading in every security traded on the exchange during the market break period. The Amex has identified 70 securities involving 16 specialist units with potentially inadequate performance that have been referred to a Subcommittee of the Exchange's Performance Committee for review. Four additional units are also in the process of being referred to the Subcommittee for review. The Amex expects that either disciplinary action or reallocation proceedings will be instituted in a number of the questionable situations identified. Amex has promised to keep the Division staff informed of developments in this area.

The Division Report recommendations requested Amex to focus on gap openings, delayed openings and trading halts when reviewing specialist performance and explore why a large number of Amex stocks remained closed for extended time periods. Amex has indicated it is currently reviewing all trading halts and

- 1/ Currently, the NYSE uses absolute standards to evaluate performance. This means that a specialist has to be graded below a certain unacceptable level on the SPEQ or other performance criteria to be subject to performance improvement initiatives.

delayed gap openings that occurred during the market break. The Exchange has identified some instances of questionable delays or halts and these are being pursued by the Exchange's Performance Committee.

Amex has indicated that it is considering some changes to improve the administration of trading halts such as requiring all trading halts and gap openings to be approved by an Exchange official or Floor Governor, rather than just a Floor Official as currently required. Further, the Amex is considering requiring all specialists to prepare a form, which currently is optional, indicating the pre-halt condition of the specialist's book and any orders represented in the trading crowd prior to and subsequent to any halt in trading.

Four regional stock exchanges, the Cincinnati Stock Exchange ("CSE"), Midwest Stock Exchange ("MSE"), Philadelphia Stock Exchange ("Phlx"), and PSE, have examined individual specialist performance during the market break and have not identified any questionable actions that would require disciplinary actions or reallocation proceedings. These exchanges note that they have not received any formal complaints regarding specialist performance during the market break. The Boston Stock Exchange ("BSE") is currently investigating one matter that relates indirectly to the market break. Individually, the MSE supports the development of objective, relative standards to evaluate specialists and will be filing with the Commission, in the near future, a new set of criteria for specialist evaluation based on a relative standard of performance. The PSE is currently examining the market making obligations of regional specialists as opposed to primary market specialists, and has agreed to explore this issue with each of the other regional markets.

B. Small Order Routing and Execution Systems

1. NYSE should increase efforts to improve the processing of orders by continuing to upgrade order-handling equipment through implementing new and more efficient, higher-speed printers, and adding new disk drives, minicomputers, and improved software. The Division also encourages the NYSE to increase the number of stocks on electronic display books and to complete the connection between the electronic display book system and limit order system, so that fewer orders will have to be printed and then handled manually.

The NYSE responded that it has made improvements to virtually every exchange order processing system since the market break. As noted above, the NYSE has created an Operations Advisory Committee with the objective of synchronizing planning

and operational efforts to provide the capacity to handle routinely a 600 million share day by the end of 1988. The NYSE has doubled the number of stocks on electronic display books and is taking steps to route both market and limit order traffic to the display books via a new communication switch, thus averting backlogs at the universal floor device controller switch ("UFDC") and reducing the number of orders that must physically be printed out. In addition, the NYSE has substantially increased the number of printers on the floor and implemented enhancements to those printers. In February 1988 the NYSE completely replaced its odd-lot system, and by April 1988, the NYSE plans to upgrade the limit order system, resulting in a 50% increase in capacity.

2. Amex should review conditions that led specialists to shut off AUTO-PER.

Amex is taking several steps to address the conditions that led some specialists to shut-off their AUTO-PER screens. First, Amex is working to relocate terminals that are behind specialists so the terminals will be at their front and thus easier to use. Amex is also redesigning the AUTO-PER screen to eliminate the need, in some situations, to use an additional page to complete execution of an order. Amex believes this redesigned screen will permit specialists to execute orders more quickly and can thereby reduce the possibility of having orders printed and executed out of sequence, a concern that caused some specialists to shut-off their screens. Finally, Amex is conducting a pilot program with respect to the implementation of an electronic book that it believes will provide smoother integration of AUTO-PER and booked limit orders.

3. Implement or accelerate systems improvements to enhance ability to accommodate volume surges.

The BSE currently does not have an automated routing and execution system. BSE, however, is in the process of developing the BEACON system--Boston Exchange Automated Communications and Order-Routing Network. BSE expects that when BEACON is in place it will be able to process at least 10 million shares per day, which is approximately three times its current average daily volume. BSE expects BEACON to be fully operational by year end.

The CSE has been in the process of implementing major hardware and software improvements to its trading system to accommodate volume surges and higher volume levels. CSE states that the implementation of these enhancements is progressing expeditiously at this time and should increase capacity by approximately 50%. CSE believes these enhancements will enable it to process volume such as occurred during the week of October 19 without any problem or delay.

MSE has increased the capacity of its MAX system from 36,000 trades per day to 54,000 trades, a 50% increase, since the market break. According to MSE, this increase means that, assuming a normal mix of orders, its system could process, with no delays or problems, the volume of orders experienced during the market break. Additional changes are being implemented through June 30, 1988 that will increase capacity further to 60,000 trades. MSE also has developed a "performance management measurement methodology" to improve MSE capacity forecasting and obtain increased capacity with their current systems on an as needed basis. Both staff and software tools have been added to implement this program throughout 1988.

Phlx estimates that PACE system capacity has been increased from approximately 12,500 orders per day to 17,000-17,500 orders per day since the market break. 2/ Phlx states that further enhancements that are expected to be in place by June 1988 should increase system capacity to over 20,000 orders per day without queuing. The Phlx also has accelerated its plans to replace its current computer system for PACE by year end. Phlx estimates this change will increase capacity to 40,000 orders per day and will allow Phlx to handle its anticipated share of volume on an 800 million to 1 billion share day. Further, when its new computer system is in place Phlx believes it will be able to increase capacity to accommodate volume surges with less than 24 hour turnaround time.

As noted in the Division's Report, Phlx has also made modifications that permit automatic reporting to continue when the automatic execution feature of the system is disengaged. This will allow Phlx to switch to manual execution of orders, which was done on October 20-22, without encountering the reporting delays that occurred at that time.

Phlx also has increased the capacity of its CENTRAMART System, which processes incoming quotation and transaction information, by approximately 20% since the market break. Further enhancements are expected to be implemented on April 1 that would allow this system to handle Phlx's share of 600 million share days. By year-end, computer enhancements should increase CENTRAMART capacity to the 800 million to 1 billion share level and allow additional capacity to be added quickly when needed.

PSE states that it has doubled SCOREX's capacity since the market break to 50,000 messages per day. 1/ "Messages" would

2/ The PACE system processed 14,927 trades on October 19.

2/ PSE is planning to conduct a test of the systems capacity on March 5 and 6.

include incoming orders, order status report requests, and order cancellations. On October 19 and 20 SCOREX received 47,000 messages per day. PSE achieved this increased capacity primarily by adding two additional data communication lines between San Francisco and Los Angeles, which expanded capacity of this component of the system by 50%. The PSE believes that with this increased capacity it would now be able to handle the volume levels experienced during the October market break without problems. 4/ PSE notes that further enhancements still underway, such as the elimination of unnecessary trade and quote data received from Securities Industry Automation Corporation ("SIAC") and the possible addition of two communication processors, should provide reserve capacity to accommodate even higher volume levels. Finally, PSE expects that its on-going computer replacement project, to be completed within the next 2 years, will increase capacity to 100,000 messages per day.

4. Develop contingency plans to cope with order routing and reporting difficulties during periods of unusual volume, including back-up systems, personnel training, and improved communication with public customers.

BSE has stated that once it has implemented its BEACON system, it also will create a back-up system. As to training, floor operations personnel currently trained to supplement floor brokerage functions will also be trained in the BEACON system. BSE non-floor personnel also are trained in a variety of clerical floor functions.

CSE has upgraded its staff with more qualified employees to improve overall competence. CSE also notes it is continually reviewing and upgrading the quality of its back-up systems.

In 1988, MSE intends to improve back-up capabilities including a communications link between MSE and large member firms and service vendors. Further back-up capabilities are being planned for future years. The MSE is also developing a contingency capacity fall back plan for 1988 that will identify any non-essential MAX activity that could be eliminated during unusual volume surges to accommodate more volume.

MSE also has developed a program to train upstairs personnel to supplement floor staff in "volume breakout situations." The staff will be trained in Trade Input and MAX customer interface functions. Training classes will begin in March, with refresher courses scheduled on a quarterly basis. MSE procedures provide

- 4/ PSE states it ran the internal tape for October 19 against their upgraded system and that there was no problem in processing the volume for that date.

for the additional staff to be on the trading floor within 15 minutes when needed.

Phlx believes that it currently has adequate back-up personnel at all levels including data processing, operations and marketing/customer communications. In addition, Phlx notes that the PACS system will have two important back-up systems when the computer changes noted above are implemented by year end. First, all computer functions will be performed in duplicate and cross-checked so that any system breakdown will be detected immediately. Second, because the new computers are modular, additional temporary capacity can be added within a day.

The PSE is refining its contingency plans to re-route orders manually to floor booths if its other enhancements prove insufficient at a particular time. PSE also has formed a working group to plan the training of staff to meet the requirements of a market disaster, such as providing relief for regular staff. A list of former options staff who have assumed other responsibilities at the exchange, is regularly updated and these employees will be receiving refresher courses. Other staff will be trained in equities floor operations, and receive regular training updates, to supplement the equity floors when needed.

5. Improve exchange communication with retail firms concerning problems, delays, and changes.

BSE intends to notify BEACON users of delays and other system problems through administrative messages, supplemented by direct contact with member firms. In addition, BSE has recently appointed a new officer who, among other things, will be responsible for improving communications with member firms.

The CSE has made certain improvements, including a direct line to retail firms, to expedite communication concerning system problems and delays.

MSE recently has implemented procedures to shorten the amount of time it takes to notify retail firms of problems or changes to MAX by both administrative message and telephone. Under the procedures, MSE will first notify firms of problems, delays or changes to MAX through administrative message and will follow-up with phone calls to the firms.

Phlx has developed procedures to ensure there is adequate notice to PACE users and Phlx marketing personnel of any changes to system execution parameters.

PSE currently is upgrading and formulating its current procedures for contacting retail firms when system operational problems or delays occur. PSE also will be notifying SCOREX users that during periods of extremely heavy volume the automatic

execution feature may be disengaged to enable additional "throughput." Both firms and the SEC would be notified prior to any actual disengagement of the automatic execution features.

6. Improve coordination between exchanges concerning problems with, or shut-down of, small order systems.

Both the Amex and NYSE believe more effective intermarket communication is necessary. NYSE's Operations Advisory Committee will be working to ensure better communication concerning system delays among the markets.

CSE states it is committed to timely communication, by both telephone and administrative message, with other markets on problems with CSE systems.

MSE has implemented the procedures necessary to use the ITS broadcast administrative message capability at SIAC to notify other Exchanges of problems or shut-down of small order systems, as agreed upon with the other exchanges.

The Phlx questions whether improved coordination among the markets on small order system problems would be useful. Phlx notes that it is difficult to predict the response of member firms to system problems and that it would not want to be responsible for having another market modify its own systems in anticipation of increased diverted volume that never materializes.

PSE is contacting other exchanges to explore the development of better communications among the markets during a market break. PSE believes better SRO communications and coordination of activities for the benefit of the market as a whole would be particularly beneficial concerning the exchanges' automatic execution systems.

C. ITS

1. Consider adopting default procedures to provide that, when a commitment to trade over ITS is not accepted or rejected within the applicable time frame, an execution report will be automatically generated by the system, based on the commitment price or the then current quotation (whichever is better) for the security in the receiving market.

The exchanges were divided on the issue of the default procedures. While the PSE, MSE and CSE thought that such procedures were attractive in concept, Phlx, NYSE, Amex and BSE found such procedures to be unnecessary.

The PSE, MSE and CSE, however, recognized certain difficulties in the actual development of the procedures. MSE was mainly concerned that if the accuracy of the quotes is not improved default execution could consistently result in inferior executions. MSE recommended that a task force be formed to examine the feasibility of developing a mechanism to deal with such concerns. The PSE also noted the difficulty in providing default executions while the size of the ITS commitment is greater than the size of the quote in the market to which the commitment is sent and stated that the default procedure should incorporate some measure of size of commitment. Furthermore, PSE was concerned that default procedures would not in fact operate efficiently in periods of high volume and that specialists' capital positions would be "swamped" without the specialists' knowledge. PSE also argued that because the "then current quotations" could possibly not be the "best," the default could create a trade-through of another market. Finally, PSE believes that significant systems efforts will be required to implement the on-line linkage between the current ITS system and the quotation system that would be necessary for the default procedures.

The CSE noted that the proposal "does not go far enough" in today's trading environment and suggested that the proposal be extended so that locked bids and offers between different market centers instantaneously generate an ITS execution.

NYSE, Phlx, MSE and Amex also rejected the suggestion for default procedures on the grounds that system enhancements would be less costly and would correct the problem of expirations. The exchanges reasoned that if the systems no longer experienced delays, expiration of commitments would no longer be a serious problem. As they stated in their responses, the exchanges have undertaken various systems developments, which they believe will address the delays experienced in October.

2. With respect to the ITS Plan, develop pre-opening procedures that would apply after trading imbalance halts, similar to those that apply after "regulatory" halts.

The exchanges unanimously agreed that developing pre-opening procedures that would apply after order imbalance halts was of great importance to the efficient operation of ITS. Several exchanges noted that they would initiate the proposal at the next meeting of ITS representatives.

3. Define procedures for communication among the exchanges, and identify an ITS contact person in each market who will be available during market emergencies.

At the last ITS Operating Committee meeting in early February, the communication issue was discussed and all exchanges agreed to designate the operating committee member as the contact person for each exchange. The contact person in turn was to designate a back-up person and communicate the information to the other participants. Furthermore, each participant is to provide current names and phone numbers for key members familiar with ITS operation and policy. Some exchanges already circulated their list to the other participants.

The CSE further recommended that the ITS Operating Committee identify certain situations that adversely impact the effective operation of ITS and develop procedures for decision-making in such situations.

4. NYSE should consider separating ITS terminals from the printing functions of other systems, such as DOT, in order to facilitate the printing of ITS commitments before the two-minute expiration period.

The NYSE does not believe that separating the ITS terminals from the printing functions of its other systems, will reduce the number of ITS expirations. The NYSE considers, however, that improving its other systems will improve the overall performance of ITS. Systems enhancements on the NYSE that would improve ITS performance include steps to route DOT and limit order traffic to the Electronic Books via a new communication switch, which would free up capacity in the UFDC. (As explained in the Report, ITS orders are routed through a UFDC switch where they are printed out by a card printer and routed to the specialist.) The exchange has also added (and is still adding) display books to further eliminate printer functions for Superdot, thereby leaving the post printers for ITS functions.

5. NYSE should, with respect to ITS complaints, investigate and try to resolve all complaints.

The NYSE believes that anticipated changes in system configuration should address many of the causes of customer complaints experienced during the October market break. In addition, the NYSE plans to further train its staff to respond to specific problems associated with system overload.

D. Market Information Systems

1. NYSE should review whether it has adequate personnel and facilities to maintain accurate trade and quote reporting capabilities during periods of sustained high volume.

The NYSE believes that it has adequate personnel and facilities to ensure accurate trade and quote reporting and has assured us that it is committed to maintaining this capability no matter what level of activity occurs.

E. Order Handling

1. The NYSE should include a review of operational capacity of firm order handling systems in broker-dealer examinations.

The NYSE intends to establish operational standards to apply to all market participants.

F. Compared Trades

1. The Division believes that the NYSE, Amex and National Association of Securities Dealers, Inc. ("NASD") should consider accelerating their efforts to generate same-day compared trades, thereby enabling members to know their positions and market exposure before trading commences the next day.

The NASD agrees that this is a good suggestion and plans an Automatic Confirmation Transaction System that, together with the Small Order Execution System ("SOES"), Order Confirmation Transaction ("OCT") service, and the Trade Acceptance and Reconciliation Service ("TARS"), would provide an almost total same-day comparison capability for the NASDAQ market.

NYSE states that its Operations Advisory Committee is working on (1) a shortened comparison cycle and (2) an automated Questioned Trade process and, further, that the exchange is developing an electronic Floor Derived Comparison ("FDC") system to accomplish these objectives. NYSE plans to implement FDC in three phases during 1988. Amex states that it has begun development of electronic systems that would allow same day floor-derived point of sale comparison for both equities and options and that it plans to begin implementation during the last quarter of 1988. NYSE and Amex report that they have been working closely with National Securities Clearing Corporation ("NSCC"), SIAC, and others on these projects.

G. Specialist Capital

1. Review minimum capital requirements for specialists.

The NYSE, Amex, Phlx, MSE and PSE, currently are reviewing the adequacy of their respective specialists' capital. The BSE, effective December 31, 1987, increased specialists' equity capital requirements from \$80,000 to \$100,000 and effective June 30, 1988, will increase the requirements to \$125,000.

2. Review present systems of specialist capital surveillance to determine if increased monitoring is necessary.

The NYSE has increased its monitoring of both specialists' capital and positions by requiring that such information be filed with the NYSE by 9:00 a.m. daily.

Based on a review of its system of specialist capital surveillance, the Amex concluded that several changes should be made in both its routine surveillance procedures and its monitoring during periods of market turbulence.

The Amex is intensifying surveillance by (i) requiring firms having specialist accounts to provide on a daily basis standardized account information for specialists (including activity on other exchanges for dual members); (ii) requiring daily information from self-clearing specialists; and (iii) closely monitoring the effects of increased capital requirements following their implementation. For times when even closer monitoring is necessary, the Amex is considering requiring specialists identified as most susceptible to damage to provide daily positions and profit and loss estimates shortly after the close of business. The Amex is prepared to have examiners review specialists' books and records, on a daily basis if needed, to obtain information not otherwise available.

The MSE is studying requiring specialists to file financial reports on a more timely basis (from quarterly to monthly for self-clearing specialists and from annually to quarterly for introducing specialists). The MSE is developing a mechanism to review specialists' inventory positions on an intra-day basis, rather than on an overnight basis only.

While PSE believes that its existing procedures worked effectively during the market break, the PSE is reviewing specialist capital surveillance systems to determine if they capture in a timely manner all the desired information for adequate monitoring. Based on the current status of the review,

it appears that some modifications to the current daily reports and monitoring process will be implemented.

3. Explore the possibility of requiring all "self-clearing" specialists to maintain a line of credit with a bank or lending institution or imposing higher capital requirements on specialists who do not maintain such a line.

The NYSE is exploring the need for specialists to maintain additional lines of credit and other lending arrangements.

The MSE and Midwest Clearing Corporation (MCC) are reviewing the possibility of imposing higher capital requirements on self-clearing specialist firms.

PSE will consider whether to require higher capital for specialists that do not have bank credit lines.

CSE states that requiring lines of credit or higher capital requirements for dealers without such accommodations is an issue that needs further review. The CSE will soon file a proposed rule change that will establish an optional minimum net liquidating equity requirement for those dealers who do no customer business and maintain letters of guarantee with CSE clearing members.

4. The NYSE should review with its members the desirability of establishing diverse lending relationships with a number of banks, as well as the feasibility of obtaining more committed lines of credit than currently exist.

Over the next several weeks, the NYSE staff will meet with a number of its largest member firms to discuss their credit and banking arrangements, including the number and types of banking relationships and efforts to obtain other financing.

III. The Options Markets

1. Examine whether strike prices should be set at the minimum increments during a period of increasing volatility.

The CBOE is considering policies to limit the addition of new strike prices for both stock and index options during periods of extreme volatility. In particular, the CBOE would limit new series to those necessary to bracket the prevailing index value or underlying stock price and to a limited number of new series farther in- or out-of-the-money. The CBOE believes that further study is required to define the scale of market volatility that

Mr. RUDER. As we all know, the market events of October were dramatic and historic, and their effects are still being felt. While these events showed how resilient our markets are, they also revealed weaknesses. In particular, we now know that market structures and trading strategies at times can cause volume and volatility that overwhelm the current capacities of our markets.

We have been warned that our markets are not working well enough. The weaknesses revealed in October must be corrected.

The Securities and Exchange Commission believes that it has the major responsibility to seek correction of these market weaknesses, and I believe that a failure to act in light of the October warning signals would not be acceptable. I believe further that cooperation and coordination between the CFTC, SEC, and the Federal Reserve Board is essential to our task.

On February 2, 1988 the Commission staff released its report on the market break. On February 3, in testimony to this committee, the Commission announced its conclusions and recommendations.

RECOMMENDATIONS

We recommended that reform efforts concentrate on improving the capacities of the interlinked equities and derivative markets. The Commission's primary recommendations were to increase the efficiency of automated systems, to increase available capital and liquidity, and to increase coordination among markets.

While we have suggested that the reduction of liquidity demands through temporary margin increases is a desirable interim measure, we continue to urge that increasing the efficiency of the interlinked markets and improving intermarket coordination offer the most important avenues for improvement of the markets.

Since the market break, the securities self-regulatory organizations have taken substantial steps to improve the efficiency of their markets, steps that are detailed in my written testimony and in the March 4 memorandum. The Commission will continue to work with the SRO's to foster further improvements in this area.

Since October, the Commission, the CFTC, the Federal Reserve Board, and the securities and futures SRO's have worked hard toward increasing cooperation and coordination. The agencies and the SRO's have made progress on emergency communication and planning, and cooperative efforts in other areas continue. The Commission will continue to pursue increased cooperation and coordination as diligently as we will pursue intermarket improvements.

Mr. Chairman, you will find in our written submissions that there has been a great deal of work and cooperation going on in order to meet problems in the markets.

You also know that on March 18 the President by Executive order established the Working Group on Financial Markets. The purpose of this group is to formalize and facilitate interagency cooperation. This working group has been asked to review market conditions and solutions offered by various studies and reports in the areas of investor confidence, credit system issues, market mechanisms, and regulatory structure. It's begun its work and I am hopeful that agreed solutions to many of the problems in these

would trigger implementation of this policy and to determine appropriate emergency strike price increments.

The Amex noted that it has decided to retain its policy of keeping new series at five point intervals for stock and index options. The Amex emphasized that it currently is examining the possibility of introducing new strike prices only at levels immediately surrounding the market price of the index or stock during a dramatic market break. Then, as the market in the underlying instrument turns around, new strikes could be added to fill in gaps between those added earlier and current levels. The Amex will discuss this matter further with appropriate exchange committees in the near future.

The PSE noted that this issue should be studied further and emphasized that coordination among all options exchanges on this matter would be necessary. PSE added that existing minimum increments had become institutionalized and that the theoretical advantages of fewer options series could be outweighed by the operational disadvantages associated with extensive educational and notification processes new procedures would involve. Moreover, exchanges would have to agree on standardized parameters that would trigger a modification to existing procedures for adding series at different increments.

While it agrees with the objectives behind limiting introduction of new option strike prices during periods of increasing volatility, the Phlx questions the efficacy of such a measure. In particular, the Phlx argues that because most stock prices do not move drastically even during relatively volatile market periods, skipping strike prices to relieve processing pressures would mean sacrificing the ability to list at-the-money strikes. In addition, the Phlx is concerned that such an approach could confuse investors and firms accustomed to the availability of a complete array of strike prices. The Phlx also notes that after the October market break it attempted to cull out certain deep in- or out-of-the-money options series with no open interest in order to relieve operational problems but that such efforts yielded minimal results.

2. Review the performance of Small Order Execution systems (RAES and AutoEx) and exchange rules that apply to market maker participation in these systems, focusing on ways to ensure high levels of participation in volatile conditions.

The CBOE is evaluating methods to ensure high levels of market maker participation in RAES during volatile periods. Efforts are focused on reducing disincentives to continued participation in RAES and establishing sanctions for leaving the system. To that end, the CBOE has submitted a proposed rule change that will give the CBOE authority to require market maker

participation in RAES in designated equity options classes through the next following expiration.

The Amex indicated that it seeks to broaden registered options trader ("ROT") participation in the following ways: (1) allow ROTs to sign on at any time during the day; (2) choose whether to participate in calls, puts or both; and (3) participate on the system for more than one options class.

3. Discuss with vendors steps that should be taken to coordinate the introduction of new series that may exceed vendor capacity and which series, if any, should be delisted when vendor data base capacity has been outstripped.

The CBOE has communicated with vendors that experienced capacity problems during the market break and has advised them to delete less active option series as necessary. In addition, the CBOE notes that the options exchanges, through the Options Price Reporting Authority ("OPRA"), recently have implemented automated and more efficient methods for introducing new series. The CBOE believes that vendor capacity strains could be alleviated in part by limiting the introduction of new series during extreme market volatility, but that it also may be necessary to allocate OPRA and vendor capacity among participant exchanges. The CBOE recommends further study.

The Amex stated that representatives of the OPRA Technical Committee began design system modifications that would permit the announcement of new options series through computer formatted messages, which then would eliminate a time-consuming and error-prone process of manually transcribing administrative messages. The Amex also emphasized, however, that series omission policies when vendors have capacity questions is a practice that should never become systematic within the vendor community and that all series should be retained at all times. Amex believes that OPRA must regularly update vendors on volume and capacity projections so that vendors have facilities in place to handle growth and spike volume peaks. Finally, the Amex noted that it has adopted a policy permitting the exchange to delist series when there is no open interest.

PSE also noted that option vendors' series file capacity issues can be dealt with best by OPRA, and the exchange has asked OPRA to focus on vendor capacity questions. Finally, the PSE stated its belief that delisting series with no open interest will not solve capacity problems in periods of high volatility and noted that, although many series have little open interest, exchange rules currently do not permit delisting of these series no matter how inactive they are.

The Phlx believes vendors' first priority should be to increase capacity. In the meantime, the Phlx and other OPRA participants have worked and will continue to work with vendors to address current capacity problems, plan for future capacity expansion, increase message capacity, and devise contingency plans for potential future problems. Finally, the Phlx notes that it believes vendors should respond to extreme volatility by delisting the furthest out series rather than those series with no open interest.

4. Examine rules regarding opening rotation procedures and methods for speeding up rotations and handling rotations during volatile periods.

The CBOE has been reviewing its opening rotation procedures since last October. Since December, the OEX opening has been informally modified by dividing OEX series into three groups that are opened separately and simultaneously. According to the CBOE, these procedures, combined with recent low volume and volatility levels, have resulted in opening rotations of no longer than 10 to 15 minutes. In February, the CBOE Board of Directors approved in principle a plan to divide OEX into seven zones, six of which would be opened simultaneously with one or more lead market makers charged with establishing opening prices and facilitating imbalances. The CBOE is working with Commission staff to develop an exchange rule filing that would implement this measure.

The Amex stated that it currently is examining the feasibility of introducing an opening rotation in its Major Market index option ("XMI") that would allow for the quick opening and free trading of more actively traded series by first opening the series that qualify for AutoEx. Upon completion of rotation in these five or six calls and puts that generally are nearest the current index value, AutoEx will be turned on to execute market and marketable limit orders up to ten contracts instantaneously. Opening rotation in other series then will proceed in a normal manner.

The PSE also noted that the minimization of rotation time is important and has been the subject of considerable concern, study and action. The PSE then described its existing rules, procedures, staffing, and training for staff, but did not discuss any modifications to its existing procedures.

The Phlx notes that during the October market break it did not encounter serious problems conducting opening rotations in any options other than certain index options. The Phlx used a reverse rotation (where the farthest out option series are opened first) for these index options and feels that the modified opening rotations were manageable. The Phlx argues that its current rules, which grant specialists substantial flexibility to design rotations to respond to unusual market conditions, will

allow the exchange to adequately address any future opening rotation problems.

5. Review ways to ensure adequate levels of market maker participation in volatile markets.

According to the CBOE, in light of the October market break its Market Performance Committee is examining the adequacy of CBOE's rules relating to market maker obligations. In particular, the CBOE is examining its policies respecting modification of these rules during unusual market conditions. The CBOE is focusing on determining which rules should be waived during unusual market conditions and whether back-up rules should be imposed to ensure that orders are handled fairly and efficiently during market stress periods.

The Amex specifically noted that efforts must be undertaken to ensure adequate levels of specialist and ROT participation in the future. While noting the difficulties in using traditional performance standards for derivative products, the Amex indicated that it was examining more formalized standards, focusing in particular on quote spread differentials. In addition, the Amex noted that it is considering implementing a modified firm quote policy for options. Both of these proposals, however, would have to be reviewed and approved by appropriate committees and the Amex Board.

The PSE also noted that market maker participation in options markets is complicated by the nature of derivative instruments generally and the differences between equity and index options, and that it would be difficult to establish equitable and uniform rules to ensure adequate levels of participation in volatile markets. The PSE emphasized that this was an industry-wide issue and that it would be willing to participate in an industry-wide review process.

The Phlx supports measures to ensure adequate levels of market maker participation in volatile markets and recommends that the Commission consider hosting a meeting of representatives of all the options exchanges and primary stock markets to consider these issues on a more comprehensive basis.

6. Evaluate the adequacy of current margin levels for index options and equity options.

Since the October market break, the CBOE has been reviewing the adequacy of index and equity option margin levels and suitability standards in consultation with major retail firms, other options markets, and the Commission. At its February meeting, the CBOE Board of Directors decided to retain the current "premium plus" margin methodology and to increase the "add-on" component of such margin calculations from 10 to 15

percent for index options and from 15 to 20 percent for equity options. The minimum margin for out-of-the-money options (both index and equity) would be increased to 10 percent. The CBOE proposes to conduct more frequent monitoring of the adequacy of these margin levels. The CBOE also is considering imposing a minimum equity requirement for accounts approved to write naked short options, straddles, and combinations. These minimums could be established as part of additional suitability guidelines, which currently are under review by the CBOE and other options exchanges.

These proposals were discussed at a meeting of representatives from the Commission and most options exchanges on February 19. At that meeting the Commission staff urged prompt consideration by the options exchanges of these proposals.

The Amex indicated that options margin should be based on current market volatility and that the exchanges should have the authority to adjust stock and index margin levels above an SEC approved floor without having to submit a proposed rule change. A committee representing all option exchanges should be established to monitor current price volatility and raise or lower stock and index option margin when appropriate. Pending progress in this matter, the Amex noted that the following initiatives should be taken: (1) increase minimum account equity to \$25,000 from \$2,000; (2) modify short straddle and combination margin to require the margin to be the amount of margin required on the side with the largest requirement plus the amount of the premium on the other side; and (3) increase the minimum amount of margin to be added to the premium for out-of-the-money options.

The PSE indicated that present margin levels, for index and equity options, may not be adequate as permanent standards and expressed its willingness to join other exchanges and the SEC in further reviewing margin levels.

The Phlx notes that it currently is working with the other options exchanges to evaluate the adequacy of stock and index option margin levels. The Phlx concludes from a preliminary review of trading data that current margin levels are adequate to ensure credit worthiness and performance of obligations even during periods of increased market volatility on the scale of last October. According to the Phlx, serious consideration should be given, however, to whether current margin levels are adequate to avoid excess speculation or curb excess market volatility. The Phlx's preliminary view is that any change in margin requirements designed to address speculation and volatility concerns should result in adoption of equivalent margin levels for both index and individual equity options.

7. Examine the performance of index option market makers during the market break, especially on October 20.

A special panel of CBOE members and persons associated with CBOE member firms has reviewed October 20, 1987 OEX pricing. The panel report characterized options pricing on the morning of the 20th as "extreme but understandable in light of the chaos and extreme volatility then prevailing in all markets." The CBOE notes that as a "goodwill gesture" it will make refunds to member firms based on the difference between the premiums actually paid by public customers for certain November OEX options during the market break and the prices they would have paid if premiums had been based on an implied volatility of 300. The total amount to be paid (approximately \$1.2 million) will be recovered by assessing a voluntary fee of \$.01 per contract on market makers' future OEX transactions. As a result of a number of customer and member firm complaints, the CBOE regulatory staff also is reviewing market maker performance during the market break, with special emphasis on October 20. The CBOE expects to complete this review in the near future.

The Amex noted that upon review of XMI trading on October 20, 1987, it was unable to conclude that overall specialist and ROT performance constituted a course of dealings that the Amex believed was fair and orderly. More specifically, the Amex found that various XMI put transactions in which the specialist unit participated were not priced fairly. Notwithstanding this finding, the Exchange only admonished the specialist for substandard performance, noting that any recurrence would result in a reallocation. The Amex also specifically instructed the specialist to develop a plan that would ensure adequate performance in the future and prevent recurrence. Similar to the CBOE, the XMI specialist and member firms representing customer executions will make certain refund payments for XMI options priced excessively during the market break. The Amex determined that XMI options with a volatility factor exceeding 325 were priced excessively.

IV. OTC Market

The NASD has responded to problems encountered during the market break by proposing a number of initiatives. These initiatives include raising the penalty for unexcused withdrawals by market makers from NASDAQ; requiring all NASDAQ market makers to participate in SOES; providing that SOES executions will continue in an OTC/National Market System security when quotes are locked or crossed; eliminating preferencing of market makers when a locked or crossed market exists; and establishing the Order Confirmation Transaction ("OCT") service that will permit firms to access market makers over the computer without voice contact.

1. The NASD should inquire into the performance of its market makers during October to assess those firms' compliance with NASD rules (for example, a number of market makers withdrew from SOES and continued routing orders through SOES, potentially in violation of SOES Rules).

The NASD's Market Surveillance Department has examined several areas of performance and is still in the process of gathering information on some. Specifically, the NASD expects to conclude a review of SOES market makers in April.

2. The NASD should review whether the OCT service should provide for automatic executions against market makers who fail to respond to messages from other market makers within a set amount of time.

The NASD believes that more experience with the system is required before automatic execution can be considered. An interim step would be to provide for negotiations as to price and size.

3. The NASD should continue to use its hotline to apprise market makers whose quotes are locked and crossed that they must take remedial action.

The NASD states that the hotline, which at present can be used to contact 50 of the largest market makers, remains in place and will be part of its routine operational procedures.

4. The NASD should inquire into the large number of transactions reported out-of-sequence to determine whether particular firms are unable to comply with the transaction reporting rules.

The NASD expects to complete by April an extensive review of the trade reporting practices of some major firms, especially those reporting many apparently out-of-sequence transactions or transactions executed after hours.

5. The NASD should review with broker-dealers the desirability of establishing diverse lending relationships with a number of banks, as well as the feasibility of obtaining more committed lines of credit than currently exist.

The NASD agrees with the suggestions and will discuss them with its members.

V. Clearing Agencies

1. Monitoring Coordination Group ("MCG") members should meet in the near future to discuss:

- (a) how well MCG procedures worked during the week of October 19 and what improvements should be made,
- (b) the participation of commodity futures clearing corporations and other appropriate futures entities with the MCG to ensure complete coordination and dissemination of information on common matters, and
- (c) procedures to update regularly contact persons and telephone numbers for each MCG member.

The NSCC, Depository Trust Company ("DTC") and Options Clearing Corporation ("OCC") support the reconvening of MCG for these purposes. NSCC further has suggested, among other things, that: (1) each participant provide to the Commission in advance of the first meeting a list of areas where the events of October 1987 might have shown improvement as a result of better inter-clearing agency and Designated Examining Authority ("DEA") cooperation; (2) each participant provide the Commission with an emergency call list that it will update; and (3) MCG be chartered, provided an administration, required to meet at least quarterly, and provide annual reports to the Commission.

2. With regard to NSCC's earlier trade guarantee, the Division will continue discussion with NSCC regarding steps to reduce remaining exposures resulting from an earlier guarantee. In addition, NSCC's current risk monitoring system should be enhanced. While NSCC's current system does not provide real-time estimates of liquidation costs, the Division understands that NSCC expects to upgrade its system within the next few months to provide estimated liquidation costs based on current and projected future prices. Please provide specific information on the planned enhancement and when it will be implemented.

NSCC has analyzed daily marks-to-the-market of guaranteed trades prior to settlement in connection with its earlier trade guarantee. NSCC believes that daily marks would pose financial difficulties for NSCC members, because NSCC members would be required to fund those marks themselves for customers that customarily are not required to pay for securities until delivery under "delivery versus payment" arrangements. NSCC is enhancing its ability to monitor and collect marks by establishing daily

computerized reporting of parameter breaks that will be available within two to three months. If a parameter is crossed NSCC will collect an immediate mark from the member through an increased clearing fund deposit.

3. Clearing agencies should consider cross-liens with all other registered clearing agencies on joint member assets, thereby allowing a clearing agency to pay over to another clearing agency the balance of a joint defaulting member's clearing fund deposit, if any, after satisfaction of losses at the first clearing agency.

NSCC and DTC indicate that the idea of cross-liens on joint assets of clearing agencies is worth exploring further. NSCC suggested bringing the matter before the MCG, and DTC advised consulting bankruptcy experts on possible legal ramifications. OCC intends to study the concept of cross-liens as part of its Special Study of OCC's systems, discussed below.

4. Although the Division believes that OCC's non-equity option ("NEO") margin system is a reliable method of risk measurement, further analysis of the margin intervals would be appropriate. In particular, the 95% coverage level may not be appropriate if the range of historical price movements is sufficiently large to pose substantial exposure to OCC.

As a general matter, OCC has undertaken a special study of its systems, which will include eight broad areas for review, including those identified in the Division's Report. The objective of OCC's study is to identify any structural weaknesses or areas that can be improved. OCC's margin committee has commissioned a sub-committee, including margin committee members and industry representatives, which will complete the study over the next three months.

5. In light of OCC's financial loss from the insolvency of its former member H. B. Shaine, Inc., OCC should analyze the feasibility of special margin requirements for increased concentrations in customer, or proprietary, accounts. Another alternative might be concentration limits keyed to positions such as uncovered short options that are excessive in light of the OCC member's financial strength.

As part of the special study noted above, OCC will address, among other things, the failure of H.B. Shaine & Co. While OCC believes its margin and concentration monitoring systems worked well during the October market break, it also believes further examination is warranted, particularly where concentrations exist

in the form of uncovered short positions and directly affect the financial strength of a member.

6. OCC should consider strengthening member net capital standards or instituting additional financial requirements (such as those required for participants in The Depository Trust Company's Same Day Funds Settlement Service) to serve as a further layer of protection against member defaults as a result of volatile markets. The possible negative effects of such requirements also should be considered.

OCC responds that it has been considering increasing its net capital requirements and will analyze the costs and benefits of such increases as part of its study. Although OCC believes that strengthening its capital requirements could provide significant risk reduction benefits, OCC notes that currently its monitoring system recognizes an OCC member's net capital as a limiting factor in the amount of risk a member can pose to OCC.

7. A number of improvements should be considered regarding OCC's variation margin process. First, OCC should deliver debit instructions for variation margin calls to clearing banks at the earliest possible time. Second, OCC should consider whether automated means, as opposed to messengers, could be used to transmit call instructions to clearing banks. Third, OCC should consider whether, in highly volatile markets that require a margin call early in the day, a special call should be made before markets close to protect against late-in-the-day volatility and to reflect OCC's potential inability to calculate and collect variation margin after the market closes.

OCC states that since the market break it has improved the process by which intra-day variation margin calls are issued. System enhancements have shortened the time needed to issue a call from an original 30-45 minutes to a maximum of 15 minutes. OCC also has shortened the time for delivery of debit instructions to clearing banks. OCC also is investigating the possibility of automating the transmittal of call instructions to clearing banks, which if effected, would further reduce the time needed to issue calls.

8. OCC should examine the general adequacy of its ability to monitor members and should act affirmatively to improve that ability in several areas. Improvements to OCC's Concentration Monitoring System may be possible to detect naked short option concentrations in relation to capital and position concentrations in relation to options open interest. Additionally, OCC should examine whether improvements are necessary in its ability to identify concentrated individual broker-dealer or customer activity that is cleared through omnibus accounts. Finally, OCC and commodities clearing organizations should improve their information-sharing channels.

OCC believes that its monitoring system worked extremely well during the market break. OCC, however, intends to review its monitoring system as part of its study. OCC also believes that improvements should be made in the sharing of information among OCC and commodities clearing organizations. Currently, OCC is negotiating an agreement whereby OCC would join commodities clearing organizations in a centralized system that would collect and disseminate pay and collect information concerning firms that belong to multiple clearing organizations.

9. OCC and its clearing banks should discuss whether improvements can be made in the options money settlement process. Specifically, OCC should consider exploring banking relationships that would enable OCC to pay collecting Clearing Members on time regardless of delays by paying Clearing Members. Additionally, OCC and the clearing banks should clarify their agreements regarding when and how payments or partial payments are to be made and confirmed.

OCC agrees that improvements should be made in the options money settlement process and recently has discussed this subject with several OCC clearing banks. OCC, among other things, has: (1) begun investigating whether banks can be given earlier notice of settlement instructions, (2) completed startup of providing facsimile notification of settlement instructions with one clearing bank, (3) undertaken an examination of banking and legal issues concerning OCC's ability to make timely payment to members in the event of default or delay by other members, including examination of OCC's use of its clearing funds and bank lines of credit.

10. OCC should discuss with banks and Clearing Members the feasibility of using OCC's pledge program to enable Clearing Members with unpaired long options to pledge those options to banks for financing. (At least one bank currently accepts long option positions as collateral for loans.) Moreover, OCC should explore the possibility of using OCC's pledge program in conjunction with DTC's pledge system to provide lenders with collateral consisting of long securities positions hedged with long put option positions.

OCC supports expanded use of its pledge program and believes greater use of that program could improve liquidity. OCC notes, however, that it is in the process of requesting the Federal Reserve Board to consider expansion of current regulations concerning loan values of options positions. OCC also states that it would be willing to explore with DTC whether combined reports covering options and securities positions could be provided to banking institutions.

VI. Other Recommendations

Finally, apart from these discrete steps to address problems regarding operational capacity and contingency planning as identified in the Commission's testimony and the Division's Report, the Division is continuing to evaluate and discuss with market participants those regulatory and market structure concerns raised in the Commission's testimony. Because these issues are so closely connected with the Commission's development of proposed legislative initiatives, we believe it is more appropriate to address these matters in conjunction with the Commission's review of possible legislative steps.

areas will be forthcoming promptly as a result of our cooperative efforts.

While I believe that interagency coordination is critical, it is not necessary at this time to create formal permanent coordinating structures such as are suggested in Chairman Proxmire's proposed legislation. The proposed legislation does, however, accurately identify the issues such as circuit breakers on which interagency coordination should be focused.

Let me emphasize that, if cooperative efforts do not promptly result in acceptable solutions, the Commission will take appropriate action as an independent regulatory agency, including, where necessary, the submission of legislative recommendations. In my written testimony I have identified areas that, in my opinion, may require legislative solutions if cooperative efforts fail. I also identified some areas where I believe legislation will be necessary in any event.

International cooperation is another priority area, one to which the Commission will devote substantial attention in the near future. You should know that in pursuit of this goal I have within the last 2 months traveled to Japan and the United Kingdom where I have had useful conversations with regulators and market participants in these major foreign markets.

In summary, while October showed market strength, it also revealed weaknesses that must be corrected. The Commission is committed to working with the self-regulatory organizations, other agencies, the administration, and the Congress, to maintain the fairness, orderliness and competitiveness of our Nation's securities markets. Let me emphasize in closing that the Commission's highest priority is and has been to work with these bodies in an effort to find consensus solutions to the weaknesses revealed by the October market break.

[The complete prepared statement of David S. Ruder follows:]

TESTIMONY OF
DAVID S. RUDER
CHAIRMAN
U.S. SECURITIES AND EXCHANGE COMMISSION
BEFORE THE SENATE COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
CONCERNING THE OCTOBER MARKET BREAK

March 31, 1988

I. INTRODUCTION

The October market break was one of the most dramatic events in the history of the U.S. financial markets. In testimony before this Committee on February 3, 1988, I described the market break and set forth the Commission's conclusions and recommendations regarding, among other things, actions that the Commission believed the self-regulatory organizations needed to take in order to increase their ability to handle heretofore unprecedented volume and volatility in their markets. I am pleased to present this testimony today describing the progress that has been made in implementing those recommendations. 1/

I continue to believe that many of the reforms suggested by the October market break can be accomplished by self-regulatory organization ("SRO") initiatives, by Commission rulemaking, and by coordination between the Commission, the Commodity Futures Trading Commission ("CFTC"), and the Federal Reserve Board ("FRB"). 2/ Even if these efforts are completely successful, however, certain areas, such as increased SEC emergency powers, would require legislation. In addition, if coordination efforts are not successful, other areas may require legislation.

As you know, the Commission is a member of the Working Group on Financial Markets, established on March 18, 1988, by Executive Order. The task of this Group is to consider: (1) the major issues raised by the numerous studies on the market break, (2) those recommendations of the studies that will enhance the integrity, efficiency, competitiveness, and orderliness of our nation's financial markets, and (3) the actions, including those that may be taken under existing laws, that are appropriate to carry out these recommendations. Within 60 days, or by May 18,

- 1/ Many of these steps are described in greater detail in a memorandum to me, dated March 4, 1988, from Richard G. Ketchum, Director of the Commission's Division of Market Regulation. Copies of this memorandum previously have been provided to Chairman Proxmire.
- 2/ See Appendix A for a list of the principal inter-agency and intermarket meetings that have occurred since January 1, 1988.

the Working Group is required to report to the President its views, including any recommended legislative changes. In view of my participation in the Working Group and the possibility that my views may change as a result of that participation, I have not yet reached final conclusions regarding what, if any, legislative action may be necessary. This testimony will, however, tentatively identify areas where I believe legislative action may be desirable or necessary.

II. COMMISSION RECOMMENDATIONS REGARDING SELF-REGULATORY ORGANIZATIONS AND DEVELOPMENTS SINCE FEBRUARY 3, 1988

Since my testimony before this Committee on February 3, 1988, the securities self-regulatory organizations ("SROs") have taken significant actions in certain areas, particularly regarding operational capacity and contingency planning and coordination. In addition, I have met with a variety of government and industry officials to emphasize that efforts to coordinate a regulatory response to the October market break must receive the highest consideration. The following summarizes the Commission's recommendations and steps that have been taken to address these areas.

A. Stock Exchange Enhancements

The 600 million share volume on the NYSE on October 19 and again on October 20 was nearly double the previous one-day high for trading volume. Projections that trading volume on the NYSE would increase steadily from daily averages of less than 200 million shares to daily averages of about 300 million shares, while reasonable prior to October 19 and 20, must now be changed. We have been put on notice that systems must be expanded to cope with much larger volumes than previously anticipated.

A key to improvement will be expansion of the stock exchange systems that are designed to receive orders electronically from brokerage firms and in some cases to execute these orders automatically. With the exception of basket trades, most of the orders handled by these systems are small orders for retail customers.

The Commission has recommended that the exchanges modify order routing and support systems to improve the efficiency of their systems during peak volume periods and enhance the capacities of their automation facilities so that markets do not falter due to lack of physical capacity. I am pleased to report that a number of the stock exchanges already have increased the number of trades their automatic order routing and execution systems can accommodate, or will do so shortly. All equity exchanges that currently employ order routing and execution systems with the enhancements made since October believe these systems can process a volume of orders similar to what was

received during the week of October 19-20 without problem or delay. 3/ In addition, these exchanges also have indicated that they are continuing system enhancement plans to increase further their order processing capabilities.

1. DOT Enhancements

The NYSE's Designated Order Turnaround, or DOT, system accounts for over two-thirds of the average daily share volume at the NYSE. In addition to being used to route small orders, DOT is used by institutions to route very large stock orders associated with program trading and index arbitrage. During October 19 and 20, the automated systems on the NYSE were clogged by the increased volume. The Commission has recommended that DOT should be expanded not only to avoid printing queues that developed on October 19 and 20, 4/ but also to accommodate block or program trading. 5/

Since October, the NYSE has made improvements to virtually every exchange order processing system. The NYSE has created an Operations Advisory Committee with the objective of synchronizing planning and operational efforts to provide the capacity to handle routinely a 600 million share day by the end of 1988. The NYSE has doubled the number of stocks on electronic display books and is taking steps to route both market and limit order traffic

- 1/ At the present time, the NYSE, American ("Amex"), Cincinnati ("CSE"), Midwest ("MSE"), Philadelphia ("Phlx") and Pacific ("PSE") Stock Exchanges all have small order routing or automatic execution systems in operation. The CSE is in the process of increasing its system's capacity by 50% and the NYSE has increased its system's capacity already by 50% and notes further enhancement will be in place by June. The PSE states that it has doubled its system's capacity since October and the Phlx also states that it has increased its system's capacity significantly.
- 4/ See A Report by the Division of Market Regulation, U.S. Securities and Exchange Commission (February 1988) ("Staff Report") at pp. 7-21 - 7-23.
- 5/ See N. Katzenbach, An Overview of Program Trading and its Impact on Current Market Practices ("Katzenbach Report") (December 21, 1987) at 30. The Commission notes that the NYSE and the other securities markets have increased automation in their markets dramatically over the past 15 years and could not reasonably be expected to predict the extreme peak volumes that occurred in October. Automation enhancements, together with the other measures the Commission is recommending, should help the markets be better prepared operationally for these peaks.

to the display books via a new communication switch, thus averting backlogs at the universal floor device controller switch ("UFDC") and reducing the number of orders that must physically be printed. In addition, the NYSE has increased substantially the number of printers on the floor and has implemented enhancements to all its printers. By April 1988 the NYSE plans to have completed its upgrading of the limit order system, and that upgrade is expected to result in a 50% increase in capacity. We also have been informed that, in response to a General Accounting Office ("GAO") recommendation, the NYSE has agreed to hire an outside entity to examine in detail and assess the NYSE's order routing and other computer facilities.

As stated in my February testimony, the Commission believes that the DOT system, a key operational link between futures and stock markets, should not encumber market linkage because of technical or capacity problems. To avoid this result, the Commission recommended that DOT capacity should be expanded so that the system can provide continuing market access to both large and small orders, even in times of market stress.

The NYSE has submitted a proposed rule change to the Commission that would restrict, for six months, member firms' ability to use DOT to effect index arbitrage program trades for customer and proprietary accounts if the DJIA moves from the previous day's close by 50 or more points. 6/ If approved, this rule change would make index arbitrage more difficult after the market moves more than 50 points. For a NYSE member firm to effect index arbitrage trades in these circumstances, it would have to execute the stock transactions through a floor broker. Because this rule change proposal is before the Commission, it would be inappropriate for me to address its merits.

2. Market Baskets

The Commission also has noted that the NYSE should consider the creation of posts for trading baskets of stocks. As the Staff Report suggests, the creation of such posts might alter the dynamics of program trading. 7/ While some arbitrage programs would continue to flow directly to the specialists in the individual stocks to maintain pricing efficiency, other institutional program trades could be focused on the basket post

- 6/ See File No. SR-NYSE-88-02. Securities Exchange Act Release No. 25400 (February 26, 1988), 53 FR 7273 (March 7, 1988). If the rule proposal is approved by the Commission, we would expect the NYSE to establish appropriate surveillance procedures to detect violations.
- 7/ See Staff Report at 3-17, 3-18. The Katzenbach Report recommends a similar measure. See Katzenbach Report at 29.

where the specialist and the crowd, perhaps supplemented by block positioners, could provide additional liquidity to the system. The existence of a basket trading post might help cushion individual stocks from the intraday volatility caused by arbitrage between futures and stocks and nonarbitrage program activity. ^{8/} The Commission indicated that it appreciates that there are considerable questions that need to be examined concerning the feasibility and design of basket trading on the NYSE. The Commission recognized that the ultimate success of this concept depends on the ability of such a trading post to pass a market test in competition with other index-based financial instruments, but recommended that the NYSE give the proposal serious consideration.

Although the NYSE has yet to submit a specific market basket plan, we understand that its staff is currently evaluating the concept. In addition, the Phlx and the Options Clearing Corporation ("OCC") have submitted proposed rule changes to the Commission that would establish a Cash Index Participation Unit (a so-called "CIP"), which seeks to create a market basket of stocks that investors can buy and sell as a unit. ^{9/} In addition, the MSE informally has discussed with the Commission staff creation of stock baskets that would trade on the MSE floor.

3. Increased Specialist Capital

As stated in my February 3rd testimony, the Commission concluded that it is unlikely that increased levels of specialist capital alone would have prevented the steep price declines that occurred on October 19 and the morning of October 20. The Commission also suggested that it is unrealistic to expect any one group of market participants to have or to commit sufficient capital to retard extraordinary selling pressures in \$3 trillion markets. ^{10/} It is also true that a specialist system designed for a market composed of individual stocks may be strained in a volatile market dominated by portfolio trading.

The events of October 19 and 20 demonstrate that the financial position of many specialist firms can become critically strained during a major market break. While specialist capital appears sufficient in normal trading situations, the Commission

^{8/} See Staff Report at 3-18.

^{9/} See Securities Exchange Act Release No. 25495 (March 23, 1988).

^{10/} As the Staff Report points out, starting the week of October 19, NYSE specialists had buying power of over \$2.3 billion of capital. See Staff Study at 4-54.

is not confident that specialist capital is sufficient if the markets continue at their present volatility levels. Thus, increased specialist capital may be helpful in any future market crisis by averting situations in which specialists reach the limits of their buying power or are in danger of failing. ^{11/} For these reasons, the Commission has recommended that minimum specialist capital requirements be increased. The NYSE, Amex, Phlx, MSE, and PSE are reviewing the adequacy of their respective specialists' capital. ^{12/}

The Commission also has recommended that specialists who self-clear should be required either to establish committed lines of bank credit or otherwise to satisfy higher capital requirements. ^{13/} Over the next several weeks, the NYSE staff will meet with a number of its member firms to discuss their credit and banking arrangements, including the number and types of banking relationships they have and how to improve their ability to obtain financing.

In addition, the Commission suggested that a private emergency dealer capital fund might be considered. Such a fund could serve as a safety net for the specialist system. ^{14/} While the details and mechanics of such an approach need careful consideration, the concept merits review.

4. Improved Specialist Performance

As indicated in my February testimony, the Commission concluded that the performance of most NYSE specialists was satisfactory on October 19, although instances of questionable individual performance did occur. ^{15/} Performance on October 20, when risk positions were exceedingly high, was generally weaker. Improved performance of individual specialists' affirmative obligations should result in increased commitments of specialist capital. In order to improve specialist performance, the Commission recommended that the NYSE more vigorously exercise its authority to reallocate specialists' stocks.

^{11/} See Staff Report at 4-58.

^{12/} The BSE, effective December 31, 1987, increased specialists' equity capital requirements from \$80,000 to \$100,000 and effective June 30, 1988, will increase the requirements to \$125,000.

^{13/} The Commission also recommended that the NYSE improve its surveillance of specialist capital.

^{14/} See Staff Report at 4-67.

^{15/} See also Staff Report at 4-6 - 4-29.

The NYSE currently has two mechanisms to reallocate stocks: (1) disciplinary procedures for violations of the specialist's obligation to maintain fair and orderly markets; and (2) reallocation procedures under NYSE Rule 103A based upon quarterly evaluations of the specialist's performance by floor brokers. The Commission urged that the NYSE use the disciplinary process where appropriate ^{16/} to sanction a specialist for failure to maintain fair and orderly markets. The Commission also indicated that a vigorous evaluation program under NYSE Rule 103A is critical to improving NYSE specialist performance and recommended that the NYSE continue its efforts to improve its evaluation standards and process by adopting relative performance measures. ^{17/} The Commission also suggested that, in evaluating specialist performance, the NYSE also should take into account the impact of the futures markets on stock market volatility, particularly at the opening. ^{18/}

The NYSE has proposed adding specific objective standards to measure specialist performance in a variety of areas. This will supplement their current specialist evaluation system which bases performance on specialist evaluation questionnaires ("SPEQ") filled out quarterly by floor brokers. While the NYSE continues to believe that relative standards of performance raise difficult issues, it has agreed to review the feasibility and desirability of developing relative measures of performance.

With regard to the recommendations concerning disciplinary action and stock reallocations, the NYSE and Amex have been conducting detailed reviews of individual specialist performance during the October market break. To date NYSE investigations into specialist performance during the market break have resulted

- ^{16/} See 1976 NYSE Report of the Committee to Study the Stock Allocation System. The report suggests that disciplinary proceedings may not be the most effective tool to enforce the specialists' affirmative obligations because those obligations are somewhat subjective.
- ^{17/} See Staff Report at 4-28, 4-29. The Commission also suggested that poor specialist performance should weigh heavily against the specialist in allocation determinations for new or reallocated listings. *Id.* at 4-29, note 75. The Commission emphasized, however, that incentives to obtain new listings are not sufficient to improve specialist performance and that the additional deterrence provided by a vigorous reallocation program is critical.
- ^{18/} In this connection, the Commission indicated that this problem might be ameliorated by coordinated opening procedures. See Section III.E., *infra*.

in the reallocation of six stocks from five specialist units (the stocks are J.P. Morgan & Co., Gould, Inc., Weisman Marcus Group, E.P. Hutton Group, Inc., A.G. Edwards, Inc. and Carter-Wallace). The NYSE has indicated that it is continuing to review specialist activity during the October market break period, and is focusing particularly on those areas of concern outlined in the Division's Report such as proprietary activity during gap openings (opening at a price significantly away from the previous last sale), delayed openings, and trading halts. To date the Amex has reallocated two stocks, the Washington Post and Continental Materials Corporation, to new specialist units. ^{19/}

B. OTC MARKET

With regard to the operation of the over-the-counter ("OTC") markets during the October market break, the Commission concluded as follows: during the week of the market break, the prevalence of unreliable quotations, delayed transaction reports, reduced market maker participation, and increased manual order handling, coupled with greater telephone inquiries, undermined the liquidity and orderliness of the over-the-counter ("OTC") market. The OTC market suffered from a combination of extreme downward volatility and unusually high share volume. An extraordinarily high number of locked and crossed markets disabled the automated small order execution systems operated by the National Association of Securities Dealers ("NASD") and by individual market makers, forcing market makers to execute small transactions manually. Because of the difficulty in reaching other market makers by telephone, customer orders often were not executed in a timely manner, not executed at all, or executed at prices that reflected only a securities firm's best estimate of the prevailing market. In addition, market making was mixed, with some firms providing liquidity and others remaining relatively inactive. ^{20/}

- ^{19/} The Amex has examined trading in every security traded on the exchange during the market break period. The Amex has identified 70 securities involving 16 specialist units with potentially inadequate performance. The operation of these units has been referred to a Subcommittee of the exchange's Performance Committee for review. Four additional units are also in the process of being referred to the Subcommittee for review. The Amex expects that either disciplinary action or reallocation proceedings will be instituted in a number of the questionable situations identified. The Amex will keep the Commission informed of developments in this area.
- ^{20/} See also Staff Study at 9-19 to 9-24.

The NASD has responded to these problems by proposing a number of initiatives. These include raising the penalty for unexcused withdrawals by market makers from NASDAQ; requiring all NASDAQ market makers to participate in Small Order Execution System ("SOES"); providing that SOES executions will continue in an OTC/National Market System security when quotes are locked or crossed; eliminating preferencing of market makers when a locked or crossed market exists; and establishing the Order Confirmation Transaction ("OCT") service that will permit firms to access market makers over the computer without voice contact. 21/

C. Options Exchanges

As indicated in my February testimony, the Commission concluded that the options exchanges experienced serious problems throughout the week of October 19 due to extreme volatility in the market for the underlying securities, the periodic absence of useful information concerning the equity and futures markets, and market makers' difficulties in hedging their options positions. The Commission stated that the impact of these factors was reflected in the numerous and protracted trading halts; in the fact that prices, or "premiums," charged for option contracts, particularly put contracts, were inconsistent, highly variable, and often unrelated to price movements in the underlying index; and in the unwillingness of some options market makers to foster liquidity by trading on a continuous basis. In particular, the Commission noted that the options markets did not provide an effective, continuous market for the most actively traded index options classes at certain times on October 19 and for virtually all of October 20. Accordingly, the Commission listed the following areas as requiring review by the options exchanges.

First, the exchanges should reconsider the effects of permitting options on indexes of securities to open prior to the opening of some percentage of component securities in the underlying market as well as the effects of continuing trading for a certain time even though underlying component securities

21/ OCT allows NASDAQ subscribers with Level 3 service to send orders in NASDAQ securities to market makers over the computer, without voice contact and is designed to provide an effective means of accessing market makers in high volume, fast-moving markets. The NASD has filed these initiatives as a proposed rule change (SR-NASD-87-54). The Commission granted temporary approval on a limited pilot basis for 90 days and solicited public comment. See Securities Exchange Act Release No. 25263 (January 11, 1988), 53 FR 1410 (January 19, 1988). Because these proposals are currently before the Commission for permanent approval, it would be inappropriate to comment further at this time.

are not trading. Second, the options exchanges, particularly the Chicago Board Options Exchange ("CBOE"), should examine methods to accelerate opening rotations. Index option opening rotations were excessively long on October 20, limiting the ability of options customers to receive timely executions. These delays contributed to higher premiums in some options series. Third, the options exchanges and market information vendors should develop a plan to reduce proliferation of options series or to delist options series from vendor quotation services in the event that vendor data base capacity threatens to be outstripped. Fourth, options markets using small order execution systems should revisit their rules governing market maker participation in these systems. Fifth, options exchanges should closely examine the performance of index options market makers, particularly on October 20, to determine whether they met their obligations to maintain fair and orderly markets to the extent practicable. The responses by the exchanges to these recommendations are as follows.

1. Delayed Openings for Index Options

The options exchanges are reviewing their rules that (a) authorize the commencement of index option trading when the underlying stock market opens and (b) permit trading to continue for 90 minutes regardless of the number of component stocks trading. The exchanges also are continuing to review their rules that require index option trading to halt if securities that account for more than 20% of the index's value are not trading.

2. Modifications to Opening Rotations

The CBOE and Amex also have been reviewing their opening rotations procedures since October. 22/ Since December, CBOE's Standard & Poor's 100 index option ("OEX") opening rotation has been informally modified by dividing OEX series into three groups which then are opened separately and simultaneously. These procedures, combined with recent low volume and volatility levels, have resulted in opening rotations of no longer than 10 to 15 minutes. In February the CBOE Board of Directors approved in principle a plan to divide OEX into seven zones, six of which would be opened simultaneously, with one or more lead market makers charged with establishing opening prices and facilitating imbalances. The CBOE is working with Commission staff to develop an exchange rule filing that would implement this measure.

The Amex also has stated that it is examining the feasibility of introducing an opening rotation in its Major

22/ The PSE and Phix also support implementing steps to facilitate completion of opening rotations so that free trading in all series can begin as expeditiously as possible.

Market index option ("XMI") that would allow for the quick opening of free trading of more actively traded series by first opening the series which qualify for the Amex's automatic execution system, AutoEx. 23/ Upon completion of the opening rotation in the five or six calls and puts that generally are nearest the current index value, AutoEx will be turned on so that it will then be possible to execute market and marketable limit orders up to ten contracts instantaneously. Opening rotations in other series then will proceed in a normal manner.

3. Proliferation of New Option Series

Precipitous market movements create unique problems for derivative options markets that do not necessarily relate to increased trading volume. As the price of the underlying instrument increases or decreases significantly, new option series are added to reflect the current value of the underlying instrument. Moreover, each new strike price added causes the creation of at least four new series, one for each expiration cycle being traded.

In October 1987 this proliferation of new strike prices created capacity problems for vendors who were unable to list all option series. As a result, the options exchanges have encouraged securities information vendors to increase their system capacity. More specifically, the exchanges, through the Options Price Reporting Authority ("OPRA"), have been working with vendors to address current capacity problems, plan for future capacity expansion, increase message capacity, and devise contingency plans for future problems.

In an attempt to limit the proliferation of new strike prices that necessarily accompany dramatic price changes in the underlying instrument, both the CBOE and Amex are considering the possibility of introducing strike prices only at levels immediately surrounding the market price of the index or underlying stock during a dramatic market break. This would reduce the number of new option series that would have to be listed, facilitate the listing of new series by OPRA, and permit vendors to display continuously current quotations for all series.

4. Options Automatic Execution Systems

The Amex and CBOE also currently are reviewing methods to ensure high levels of market maker participation in their

- 23/ AutoEx is an automated execution system that enables member firms to route public customer market and marketable limit orders in options for automatic execution at the best bid or offer at the time the order is entered.

automatic execution systems, AutoEx and Retail Automatic Execution System ("RAES"), 24/ respectively, during volatile market conditions. In particular, CBOE is focusing on reducing disincentives to continued participation in RAES and establishing sanctions for leaving the system. To this end, CBOE has submitted to the Commission a proposed rule change that would provide the Exchange authority to require market maker participation in RAES in designated equity options classes under certain conditions. 25/ Similarly, Amex is seeking to broaden registered option trader ("ROT") participation in its AutoEx system at the present time. 26/

5. Option Market Maker Performance

A special panel of CBOE members and persons associated with CBOE member firms has reviewed October 20, 1987, OEX pricing. The panel report characterized options pricing on the morning of the 20th as extreme but understandable in light of the chaos and extreme volatility then prevailing in all markets. The CBOE notes that as a "goodwill gesture" it will make refunds to member firms based on the difference between the premiums actually paid by public customers for certain November OEX options during the market break and the prices they would have paid if premiums had been based on an implied volatility of 300. The total amount to be paid (approximately \$1.2 million) will be recovered through a voluntary contribution of \$.01 per contract on market makers' future OEX transactions. As a result of a number of customer and member firm complaints, the CBOE regulatory staff also is reviewing market maker performance during the market break, with special emphasis on October 20. The CBOE expects to complete this review in the near future.

The Amex has noted that upon review of XMI trading on October 20, 1987, it was unable to conclude that overall specialist and ROT performance constituted a course of dealings that the Amex believed was fair and orderly. More specifically, the Amex found that various XMI put transactions involving the specialist unit were not priced fairly. The Amex admonished the

- 24/ RAES is CBOE's automated execution system. It executes public customer market and marketable limit orders at the best bid or offer at the time the order is entered.

- 25/ See SR-CBOE-88-3.

- 26/ Neither the PSE nor the Phlx currently has an automatic execution system for options orders. The Phlx, however, has submitted a proposed rule filing to establish a pilot program whereby the Phlx would introduce an automatic execution system in a limited number of equity options. See SR-Phlx-88-10.

specialist for substandard performance and noted that any recurrence would result in a reallocation. The Amex also specifically instructed the specialist to develop a plan for adequate performance in the future and to prevent a recurrence. Similar to the CBOE, the XMI specialist and member firms representing customer executions will make certain refund payments for XMI options priced excessively during the market break. The Amex determined that XMI options with a volatility factor exceeding 325 were priced excessively.

D. Clearance and Settlement

As stated in my February testimony, the Commission concluded that clearing agencies, broker-dealers, and securities markets cooperated successfully during October 1987, to compare, clear, and settle unprecedented sustained daily trading volume. Although the volume placed tremendous strain on personnel and systems, approximately 95% of the trading volume was cleared and settled within routine time frames. Volume and record price volatility also dramatically increased the financial risk to clearing agencies and their members. Although some losses were suffered, clearing agency safeguards were effective in preventing significant or widespread losses.

The Commission also indicated, however, that the record volume and volatility suggest the need for improvements in two primary aspects of the clearance and settlement process: post-execution trade processing and clearing agency safeguards against member default.

To address post-execution trade processing concerns, the Commission recommended that the NYSE, Amex, and NASD should consider accelerating efforts to compare all trades on the trade date. Currently, over 50% of share volume is compared through two-sided traded input that results in compared trades several days or longer after the trade date. The October 1987 experience indicated that the current two-sided comparison process cannot be completed fully on a timely basis when sustained daily trading volume becomes extremely high. The Commission recommended, therefore, that automated clearing and settlement systems should be expanded to facilitate comparison at or near the time of trade execution.

Since October, the NYSE has indicated that its Operations Advisory Committee is working on (1) a shortened comparison cycle and (2) an automated Questioned Trade process and, further, that the exchange is developing an electronic Floor Derived Comparison ("FDC") system to accomplish these objectives. The NYSE plans to implement FDC in three phases during 1988. The Amex also has begun development of electronic systems that would allow same day floor-derived point of sale comparison for both equities and options and that it currently plans to begin their implementation

during the last quarter of 1988. Finally, as discussed previously, the NASD has implemented its OCT service on a pilot basis. In conjunction with SOES and the Trade Acceptance and Reconciliation Service, implementation of OCT should provide an almost total same-day comparison capability for the NASDAQ market.

To enhance clearing agency safeguards against member default, the Commission suggested that individual clearing agencies also should consider a variety of enhancements to their risk management systems to reflect increased risks resulting from increased price volatility and trading volume. The Commission suggested that those considerations include enhanced member monitoring systems to enable clearing agencies to obtain better and more up-to-date information about members' financial strength, activity in other markets, and customer activity. The Commission also urged that clearing agencies consider whether risks posed by individual members require increased capital requirements or the deposit of additional assets with the clearing agency.

The Commission also recommended that options clearing systems and market participants reexamine other safeguards and consider improvements. As demonstrated in October, equity price volatility can generate geometric increases in options price volatility. In light of this experience, the Commission suggested that the Options Clearing Corporation ("OCC") enhance its monitoring techniques in order to provide better early warning of risks and increase measures to guard against those risks when they appear. Additionally, the Commission recommended that basic volatility assumptions and margin formulas be reassessed. When OCC margin is insufficient to cover intra-day volatility, OCC resorts to variation margin calls to protect itself. The Commission stated that events in October suggest that OCC should reassess the manner and timing of variation margin calls to determine whether it can obtain earlier warning of and protection from potential member insolvency, especially for volatility that occurs late in the trading day near the close of banking hours. Finally, as noted below, the Commission stated that initiatives to achieve a more coordinated credit, clearing, and settlement system across markets should have a very high priority. 27/

27/ The Commission also suggested that attention to clearing problems in the futures markets should have a high priority. See Task Force Report and CFTC Staff Follow-up Report on Financial Oversight of Stock Index Futures Markets During October 1987 (January 6, 1988).

III. POSSIBLE LEGISLATIVE INITIATIVES

A. Emergency Authority

In addition, the Commission has recommended that it be given the authority, to supplement that provided by Section 12(k) of the 1934 Act, 28/ to take a variety of steps in a market emergency. In making this recommendation, the Commission emphasized that the SROs will remain the primary decision-makers in an emergency. The SROs have first hand knowledge of the conditions in their markets and can be expected to act responsibly. Nonetheless, in light of new trading strategies and market structures, the Commission has recommended that it should have the authority, roughly equivalent to the CFTC's current emergency authority, to act in an emergency to implement a variety of measures, including margin changes, delayed openings, early market closings, and temporary trading halts. 29/

The Commission has had discussions concerning a coordinated emergency plan with the CFTC and the Federal Reserve Board. While ultimately the solution in this area, as in other intermarket areas, may be more formal regulatory consolidation, 30/ in the near term the expansion of the SEC's emergency powers and continued efforts at interagency planning are significant short-term objectives. The latter, I believe, can be accomplished by agreement rather than legislation.

B. Coordinated Credit, Clearing, and Settlement

The Commission has recommended a more coordinated credit, clearing and settlement system across markets. As the Brady Task Force concluded, investors and professionals trading futures on stock-indexes and underlying securities treat the various markets as a single unified market. Clearance and settlement of transactions in these markets should be coordinated to the greatest extent possible.

28/ Among other things, Section 12(k) authorizes the Commission, with the President's approval, to suspend trading on all exchanges or OTC in non-exempt securities for up to 90 days under certain circumstances.

29/ See Section 8(a)(9) of the CEA. Section 8(a)(9) empowers the CFTC to direct contract markets to take appropriate action to maintain or restore orderly trading, including increasing margin, whenever the CFTC believes an emergency exists. An emergency is defined generally as a situation in which market disturbances prevent the market from accurately reflecting supply and demand.

30/ See Section III.N., infra.

Currently, investors and professionals trading simultaneously in the futures, options, and stock markets must participate, or clear their transactions through clearing agents that participate, in clearing organizations that service each of these markets. For example, a transaction involving a purchase of exchange traded index options must be cleared through the Options Clearing Corporation, a purchase of a futures contract on the Chicago Board of Trade must be cleared through the Chicago Board of Trade Clearing Corporation, and a sale of stock on the New York Stock Exchange would typically be cleared and settled through the National Securities Clearing Corporation and The Depository Trust Company.

Despite the need for better coordination, clearance and settlement of all futures, options, and stock transactions through a single entity is impractical in the short term and may be ill-advised in the long term. Existing clearing organizations serve the unique needs of the stock, options, and futures markets and allocate default and credit risks differently to meet the requirements of those markets. These needs are best recognized in separate clearing systems. Additionally, unified clearing of transactions through a single organization might have the effect of transferring credit risks from one market to the other, or even to other sectors of the economy, particularly the banking industry.

Unified clearance and settlement of related options and futures contracts could be advanced considerably, however, through the development of facilities for centralized clearance of options and futures contracts in a manner that has been proposed by the Intermarket Clearing Corporation and the Options Clearing Corporation. Establishing a single facility (or interfaced competing facilities) to hold both options and futures positions would facilitate credit decisions, enhance dealer and market liquidity, and reduce credit risks associated with those positions.

Development of unified options and futures clearance facilities could be integrated with stock clearing organizations to form a network of interfaced, coordinated clearing organizations serving each of the different stock, options, and futures markets. Improvements must be pursued to expand current informal information sharing arrangements; to coordinate member payments to different clearing organizations; and to rationalize the time frame for those payments to permit members and their bankers to know their positions and risks and to permit timely movements of payments.

I am hopeful that the Working Group can reach a consensus in this area. Even if consensus is reached, however, several legislative initiatives may be required in order to facilitate the development of a unified clearance and settlement system.

First, bankruptcy laws affecting securities brokers and futures commission merchants ("FCM") engaged in inter-market activity (for their own and customer accounts) must be harmonized. Uncertainty concerning the treatment of intermarket positions in the event of broker-dealer or FCM insolvencies prevents, among other things, commitment of capital to finance dealer and customer positions necessary for liquid markets. More specifically, competing claims to positions in stock index futures, in the event of FCM insolvencies, are governed by the Bankruptcy Act and CFTC regulations. Competing claims to securities and options positions are governed by the Bankruptcy Act and by the Securities Investor Protection Act. Customers of securities broker-dealers benefit from federal insurance administered by the Securities Investor Protection Corporation but FCM customers do not. Moreover, the CFTC has authority to clarify, by rule, terms affecting priorities for FCM bankruptcies, but the Commission does not have similar power for broker-dealers. Thus, for example, the Commission lacks authority to provide, through rulemaking, for uniform treatment of customers in the event of broker-dealer insolvencies.

Second, the laws of the various states lack uniform requirements for transfers and pledges of options, and transfers and pledges of certificated and uncertificated stocks. Those requirements are set forth in state commercial statutes (adapted from Articles 8 and 9 of the Uniform Commercial Code) that vary significantly from jurisdiction to jurisdiction. Approximately 25 states do not have statutory standards recognizing uncertificated securities. Judicial interpretation of those laws also varies among states, and determining which law to apply in multistate transactions can often be an extensive exercise. Investors, market professionals and their lenders should have a single, clear set of rules for the transfer and pledge of securities, similar to those being developed by the U.S. Treasury Department for transactions in U.S. Government Securities.

Moreover, state commercial laws appear to hamper the development of safe and efficient facilities for clearance and settlement of cross-border transactions. Article 8 of the Uniform Commercial Code appears to preclude clearing organizations from using non-U.S. depositories to hold securities certificates outside the United States. Efficient processing of transactions across borders in global securities markets requires securities certificates to be immobilized in the issuer's country of domicile, with deliveries on the books of clearing organizations in other market centers. Changing commercial laws in certain states with stock and options markets could take several years and may not be an adequate response since investors and professionals may be located anywhere in the United States. The laws of the states in which they, rather than the markets, are located might be applied to invalidate such book-entry deliveries. I have requested that the Commission staff review

whether legislation authorizing the Commission to establish federal rules for the transfer and pledge of stock and options would be desirable.

C. Holding Company and Affiliate Risk Monitoring

Uncertainty concerning the total risk exposure of participants in the stock, options, and futures markets exacerbated conditions during the market break. Timely, accurate and complete assessment of that risk exposure on a routine basis is essential to safe markets. Information necessary to complete assessment of market participant risk exposure is not always available, however, because financial exposure to market participants can emanate from unregulated corporate affiliates conducting a variety of different securities or financial activities. For example, holding companies of some investment banking firms engage in bridge financing transactions. In these transactions, the holding company commits its own capital, often for acquisition-related or leveraged buy-out transactions with investment banking clients of their subsidiary broker-dealer. Also, some broker-dealers have large affiliates that deal actively in foreign currencies, mortgages, and interest-rate swaps.

Requiring holding companies and affiliates to maintain records and to report information concerning their financial and securities activities would help to reduce uncertainty concerning market participant risk exposure. Accordingly, I believe it may be appropriate to adopt legislation that would authorize the Commission to establish recordkeeping and financial reporting requirements for holding companies and affiliates of registered broker-dealers, government securities dealers, and municipal securities dealers.

D. Large Trader Reporting - Securities

At the present time, the NYSE audit trail system tracks over 1,500 securities. The Commission, through its staff inspection program, has found that all the SROs are diligently continuing to improve the quality of their audit trail data. SRO audit trail and surveillance systems have been highly effective in detecting trading violations. Indeed, from 1984 to the present, the stock and options exchanges have completed 503 disciplinary actions involving trading violations.^{21/} Nevertheless, the Commission

^{21/} These figures do not include an additional 481 actions for position limit violations for index and equity options. Trading violations encompass, among other things: frontrunning; stock, option, or stock/option manipulation; stock or options marking; wash or prearranged trades; fictitious trades; and short sale violations.

has recommended that SRO surveillance and trade reconstruction efforts would be further enhanced by the development of "large trader" information systems for the stock market. Accordingly, the Commission staff is reviewing the desirability of proposing legislation that would require securities traders to report large transactions to the Commission. This requirement would enable the Commission more easily to identify and monitor the activities of significant traders in the equities markets.

E. Coordinated Openings and Closings

The Commission has concluded that the events of October suggest the need to consider greater coordination between the stock and futures markets to deal with pricing disparities and instability, particularly at openings and closings.

During the market break, pricing disparities and instability were particularly acute at the openings. With the futures markets contributing to price discovery, this point of stress is likely to remain even if measures to expand markets and limit large liquidations are put in place. Allowing futures to open before stocks ^{12/} can put great stress on specialists, as shown by the openings on October 19 and 20. If index futures open at a large discount to the opening cash index prices, ^{13/} a specialist in an individual stock is unlikely to absorb imbalances aggressively because the discount implies that prices of stocks will go down. ^{14/} The discount also may exacerbate any sell pressure otherwise existing in the stock market while discouraging buyers from entering the stock market.

To the extent that non-simultaneous openings are determined to be a problem, one remedy might be to delay the opening of index futures until a certain percentage of the underlying stocks can be opened. Such an approach could be supported on the rationale that both markets should open for trading simultaneously.

-
- ^{12/} One stock index futures contract, the Chicago Board of Trade's Major Market Index contract, opens 15 minutes before the NYSE. In addition, in times of market stress, the futures will open before stocks are opened in the specialist system because stock index futures open immediately without price stabilization efforts.
 - ^{13/} These prices will be based upon the previous day's closing prices and the prices of stocks that open quickly.
 - ^{14/} When there are large discounts, arbitrageurs usually will buy index futures and sell baskets of stocks comprising the index. See Staff Study at 1-4 - 1-5.

Similarly, measures to coordinate or impose market closings also require further consideration. The stock and futures exchanges currently have authority to close the markets if conditions warrant. Stock exchanges also have the power to halt trading on individual stocks if conditions warrant. These powers should be retained. Additionally, halting trading on futures or stock markets temporarily if a certain number of stocks are closed, or closing both markets temporarily if a market-wide price or volatility index reaches preset levels, may increase information flows, alleviate credit concerns, reduce panic, and provide time for contra-interest to enter the market. This is another area that I expect the Working Group will discuss. Because the markets and the agencies already have the necessary authority in this area, if the Working Group can produce a consensus, legislation will not be needed.

F. Block Trading Procedures

The Commission has suggested that the creation of block trading procedures, similar to those used in the stock markets, might allow the futures markets to accommodate futures blocks in a more liquid and orderly way. ^{15/} In the listed stock markets, blocks generally are negotiated upstairs and then crossed on the floor, using specialized procedures to give priority to public limit orders without allowing the crowd or the specialist to interfere unduly with the cross. ^{16/} The effect of such a procedure is to allow block sales to be accomplished without causing severe price disruptions. The Commission indicated that block trading procedures offer significant potential efficiencies for futures trading, and should be examined. The Commission also suggested that, if the Commodity Exchange Act's ("CEA") prohibition against prearranged trading ^{17/} is inhibiting the development of improved block trading procedures, legislative changes should be considered.

G. Margin Requirements

In its February testimony, the Commission concluded that futures products enjoy greater leverage in part because they are cash-settled and have lower margins, ^{18/} and that this greater

-
- ^{15/} The Commission notes that a "sunshine trading" rule proposal by the New York Futures Exchange that would have a similar purpose is pending before the CFTC. See 52 FR 2575 (January 23, 1987).
 - ^{16/} See NYSE Rule 127.
 - ^{17/} See, e.g., CEA Section 4c, 7 U.S.C. Section 6c; 17 CFR 155.2(f).
 - ^{18/} See Staff Report at 3-19, 3-20.

leverage permits major long futures positions to be established with relatively small initial capital. The Commission also suggested that this greater futures leverage permits the rapid liquidation of large positions in the futures market, or at least encourages the perception that such rapid liquidations may be possible.

An example may help to highlight the differences between futures and stock margin. If an institution purchases \$1 million worth of stock, it generally will pay the full \$1 million within 5 days, although, if permitted by its charter to trade on margin, it only would be required to post \$500,000. In contrast, if that same institution sought to purchase \$1 million worth of S&P 500 futures, it only would be required to post \$133,200, ^{41/} although it would be subject to daily variation margin calls.

The extent to which high futures market leverage contributed to the market break is uncertain. Nevertheless, the Commission concluded that there is sufficient concern about high futures leverage, and, as a corollary, serious overestimates of the degree of liquidity in the futures markets, to warrant temporary increases by the futures exchanges in initial margin levels for stock index futures for market participants, other than non-floor traders (called futures locals). ^{42/} A temporary margin increase for a specific class of traders could be effected by agreement of the futures exchanges.

The Commission suggested that a temporary increase would permit additional opportunity to review the effects of different

^{42/} This hypothetical assumes the S&P 500 future is trading at 270 and that the initial speculative margin is \$18,000 (in fact, the CME recently raised it to this level). The requirement that a futures trader make additional mark-to-market and variation margin payments in response to price moves does not change the fact that in all but the most volatile periods the trader is permitted to control a substantially larger position in the futures market than he could in the stock market. Moreover, the extraordinarily large variation margin payments required by the futures and options markets because of the low initial margin payments, raised substantial liquidity concerns for brokers during the week of October 19. See Brady Report at 51, 52.

^{43/} A "futures local" is roughly comparable to a floor trader on an Exchange floor.

margin levels in the stock and futures markets, ^{41/} as well as provide an opportunity to evaluate any resulting loss of futures market liquidity during periods of normal activity. In addition, the Commission stated that the costs or benefits of more limited margin changes -- such as increasing initial margin requirements in times of extreme downward price volatility for futures sales only -- could be considered.

Currently, initial margin levels for stock index futures are determined by the future exchange trading the product, while initial stock margins are set by the Federal Reserve Board ("FRB"). The FRB has delegated to the options exchanges the power to set initial stock index options margins through rules which must be approved by the Commission. While discussions in the Working Group and with the relevant stock and derivative markets may produce a consensus regarding margin, to date the futures exchanges have not agreed to raise the stock index margin percentages to the level recommended by the Commission (20% to 25%). ^{42/} If no further progress towards consensus occurs, legislation might give power to either the Commission or the FRB to establish margins for all equity-related products. ^{43/}

^{41/} Because the underlying concern is leverage, the Commission also recommended that the costs and benefits of requiring physical settlement be evaluated. See Staff Report at 3-19, 3-20.

^{42/} Immediately following the market break, the options exchanges filed proposed rule changes, which the Commission approved, increasing index margin requirements for short index positions to 100% of the premium plus 10% of the index value. The previous requirement was premium plus 5% of the index value. In addition, on February 29, 1988, the options exchanges met with SEC staff to discuss additional margin proposals in detail. These proposals include, among other matters, the possibility of increasing index and equity options margin to premium plus 15% and premium plus 20%, respectively, as well as establishing procedures to reevaluate existing margin levels on a quarterly basis. The Commission expects to receive final proposals soon.

^{43/} Another area the Committee should continue to monitor concerns frontrunning. Frontrunning generally involves trading a stock, option, or future while in possession of non-public information regarding an imminent block transaction that is likely to affect significantly the price of the stock, option, or future. The securities exchanges expressly prohibit frontrunning. See, e.g., CBOE Circular No. 23, revised July 1987; and Staff Study at 3-30. The futures markets do not have rules directly prohibiting frontrunning, although the Commission understands that the

H. Regulatory Consolidation

As described in my February testimony, a majority of the Commission recommends greater consolidation of regulatory authority over the securities and stock index futures markets. Two possible ways to achieve this goal are: (1) to give the Commission final regulatory authority with respect to critical intermarket issues such as trading halts, coupled with amending the Commodity Exchange Act to permit the Commission to review new and existing stock index futures contracts to determine the impact of such products on the orderly operation of the stock market; or (2) to give the Commission complete, direct regulatory authority over stock index futures.

Either of these approaches would require legislative changes. While I am increasingly hopeful that the ongoing coordination efforts among the SROs and the agencies will accomplish such of the desired regulatory reforms, I continue to believe that a more consolidated regulatory structure for these closely linked markets is the most rational approach as a public policy matter.

I. Intermarket Coordination Committee

As a separate matter, you have requested my views on the proposed Intermarket Coordination Act of 1988, which would establish a committee composed of the Chairmen of the Federal Reserve Board, the Commission, and the CFTC. The purpose of this Committee, as I understand it, would be to improve intermarket coordination in a number of areas, including clearance and settlement systems and contingency planning. The Committee also would be directed to harmonize margins across marketplaces, and establish circuit breaker mechanisms and effective methods for detecting and prohibiting intermarket frontrunning.

I am in agreement that the many areas of concern regarding the markets enumerated above deserve the immediate attention of the agencies you have named as well as of the self-regulatory organizations. I disagree, however, with the suggestion that a formal committee be created in which regulatory and legislative recommendations would be generated by a majority vote. I do not believe the Chairman of the Federal Reserve Board should have

CFTC and futures markets believe that the CEA and exchange rules prohibit frontrunning in the futures markets. See Staff Report at 3-11. In light of this position it does not appear that any legislative initiative is necessary. Nevertheless, the Committee should ensure that these apparent restrictions in the futures markets are effectively enforced.

what in effect would be the tie-breaking authority in the event that the Commission and the CFTC failed to reach consensus. Nor do I believe the Federal Reserve Board would want to surrender power to the two agencies. In view of the Commission's expertise regarding both the underlying equity markets and the futures markets I believe it should be given tie-breaking authority. To require the Federal Reserve Board to develop and maintain this expertise would be inefficient and not in the best interests of our markets and public investors.

While interagency coordination is desirable, I believe that the mandated coordination as specified in the bill is unnecessary and cumbersome. It would be preferable to keep such coordination flexible.

Finally, I must state that, while the goal of increased global information sharing is laudatory and must continue to be pursued, I believe that requiring work in this area to be conducted through the Committee may have the unintended and undesirable result of impeding the Commission's initiatives in this area. For some time now the Commission has pursued the establishment of formal and informal ties with our counterparts in Europe, Canada, Asia and other areas -- to date, the Commission has negotiated four bilateral enforcement agreements with foreign nations, and participates on a continuing basis in multilateral forums such as the International Organization of Securities Commissions and the Organization for Economic Co-operation and Development. The Commission's progress in this area is the result, in part, of its ability to be flexible and work independently, yet in cooperation with other regulatory bodies. I believe this approach is preferable to a more formalized Committee structure.

IV. CONCLUSION

The events occurring in October demonstrated both the remarkable resiliency of our markets and the need to make improvements. The securities SROs have taken significant steps since October to improve their markets. I am hopeful that these efforts, coupled with continuing coordination among the futures and securities SROs and regulators, the FRB, and the Administration will achieve most of the reforms the October market break suggests are needed.

Appendix A

Principal inter-agency and intermarket meetings in 1988.

- On January 11, heads of the SROs met at the NYSE to discuss methods of improving communications.
- On February 10, heads of the CME and NYSE met with Chairman Ruder and Acting Chairman Hineman of the CFTC.
- On February 24, all exchanges, including equity, options, and futures markets, met in New York to consider various issues related to cooperation and sharing of information.
- On March 16, representatives of all the SROs, the Commission, and the CFTC, met to discuss issues relating to inter-exchange coordination and information sharing. The SROs, among other things, established specific time frames for the implementation of additional steps to enhance intermarket cooperation, communication and coordination between and among securities and futures exchanges.
- On March 24, the SROs met to discuss the development of a "data stream" between the exchanges for the sharing of information on the status of securities trading and an improved communication network.

The CHAIRMAN. Thank you, Chairman Ruder. Chairman Gramm, go right ahead.

**STATEMENT OF WENDY L. GRAMM, CHAIRMAN, COMMODITY
FUTURES TRADING COMMISSION**

Mrs. GRAMM. Mr. Chairman, members of the committee, thank you for the opportunity of appearing before you today.

You requested that we provide you with any legislative recommendations the CFTC might have concerning the October 1987 market break. As stated by Acting Chairman Hineman at the February 3 hearing and reaffirmed in our letter to you of March 18, the Commission does not believe that legislative changes are needed. And I would ask that our letter of March 18 be made a part of the hearing record.

[Committee insert of March 18 letter.]



Wendy L. Gramm
Chairman

COMMODITY FUTURES TRADING COMMISSION

2033 K Street, N.W., Washington, D.C. 20581
(202) 254-8870

March 18, 1988

The Honorable William Proxmire
Chairman, Committee on Banking, Housing
and Urban Affairs
The United States Senate
SD-534 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Proxmire:

At the February 3, 1988, hearing before the Committee, you requested the views of the Commodity Futures Trading Commission (CFTC) on possible legislative initiatives in response to the October 1987 events in the securities and derivative markets. As Acting Chairman Hineman stated at the time, the Commission does not believe legislative changes are warranted with respect to the Commission's regulatory authority. We believe our existing statutory and regulatory powers provide adequate leeway for fashioning an appropriate response to the October market events, and we would like to take this opportunity to report to the Committee with respect to the initiatives that have been taken in this area.

First, the CFTC and the futures exchanges have taken a number of regulatory and self-regulatory actions in response to

2

concerns arising out of the October market events. These actions strengthen those systems which protect the financial integrity of futures markets, including during periods of extreme price volatility, improve financial information sharing, upgrade information systems, and implement circuit breaker mechanisms to cushion the market impact of drastic price changes. This first section also includes a description of the CFTC's broad emergency powers which underlie the basic regulatory structure for futures and commodity option markets.

Second, we wish to report on the substantial ongoing interagency and interexchange coordination and contingency planning actions, including international coordination efforts, that have taken place since October 19.

Finally, we wish to clarify certain issues concerning program trading, differential leverage between stocks and futures, and frontrunning. All of these topics were the subject of confusing and sometimes contradictory testimony in the February hearings before the Committee.

REGULATORY AND SELF-REGULATORY CHANGES SINCE OCTOBER 19

Actions by Exchanges--Financial Integrity of Futures Markets

Since October 19, 1987, the futures exchanges have taken a number of actions that are responsive to recommendations made by

the Commission's staff in the Follow-up Report on Financial Oversight of Stock Index Futures Markets During October 1987 (Financial Follow-up Report) and in the Final Report on Stock Index Futures and Cash Market Activity During October 1987 (Final Report). These actions should enhance the financial security of the futures markets, particularly during periods of substantial volatility, and should advance related objectives, such as increasing the efficiency of and coordination among clearing and settlement facilities that are recommended in other reports on the stock market events of October 1987. These actions include the following:

- o Margin pay and collect data-sharing system. In accordance with previous CFTC staff recommendations, as of October 21, 1987, all futures exchanges and clearing organizations had entered into a formal agreement for the routine, electronic exchange of margin pay and collect data with respect to dual and multiple clearing members. Such a system should enhance self-regulatory and CFTC financial surveillance over participants in multiple futures markets. Following the October market break, CFTC staff recommended implementation of this system on a priority basis. The system is currently expected to be fully implemented by the end of March 1988 for all futures clearing organizations and is expected to include option premium data from the Options Clearing Corporation (OCC) in the near future. In addition, also in accordance with Commission staff recommendations, discussions are underway concerning the inclusion of securities data from the National Securities Clearing Corporation in this system.

- o Clarification of contractual relationships between clearing organizations and clearing banks. The CFTC staff's Financial Follow-up Report recommended that the contractual relationships between clearing organizations and their settlement banks be clarified. To the extent that settlement bank confirmations of variation margin payments are recognized to be final and irrevocable, the flow of variation funds through the clearing system should be facilitated, as the clearing system operates principally as a conduit for the transfer of funds from clearing firms making net variation payments to clearing firms receiving net variation collects. The Chicago Mercantile Exchange (CME)

Clearing House, the Chicago Board of Trade Clearing Corporation (BOTCC) and the OCC are currently reviewing a draft agreement designed to afford additional clarity and standardization in clearing organization and settlement bank contractual relationships.

- o Enhanced margin security against risks of extreme volatility. The CFTC's staff review indicated that no margin defaults occurred at the clearing level, that a low level of customer defaults occurred at the commodity broker or future commission merchant (FCM) level, and that margin levels established by the futures self-regulatory organizations (SROs) were sufficient for financial integrity purposes during the week of October 19-23. Nonetheless, CFTC staff recommended that the futures SROs review the adequacy of margin levels and consider measures to increase the security afforded by the margin system against aberrant price spikes and extreme volatility.

Responsive SRO actions include:

- CME margins on the Standard & Poor's 500 futures contract have been increased to \$18,000 initial margin (\$10,000 maintenance) for speculative positions and to \$10,000 (initial and maintenance) for hedge positions. The CME also has established a policy of resetting its initial speculative margins for stock index futures to approximately 15 percent of the value of the contract on a quarterly basis. Chicago Board of Trade (CBT) margins on the Major Market Index (MMI) futures contract have also been increased to \$15,000 initial margin (\$10,000 maintenance) for speculative positions and to \$10,000 (initial and maintenance) for hedge positions.
- The CME Clearing House also has taken measures to enhance its own liquidity. The Clearing House is in the process of acquiring a \$250,000,000 line of credit to be used in the event of a clearing firm's default. The CME also has adopted a rule change to increase clearing members' security deposits (which are standing security that is in addition to margin deposits). The rule is designed to increase the available pool of security deposits more than ten-fold from approximately \$4,000,000 to \$40,000,000. The CME also plans to adopt rules requiring the parent company of a CME clearing member to guarantee losses on non-customer positions carried by such clearing member.
- The CME has proposed a rule change to impose additional financial requirements on clearing member firms maintaining 16 or more branch offices or a combination of 32 or more branch offices and guaranteed introducing brokers.

-- Also in response to CFTC staff recommendations following the market break, the CME has submitted a rule proposal designed to establish a margin system for option positions that identifies more effectively positions that carry greater risk and that, therefore, should incur higher margins. This new option margin system, which was submitted in early February, is currently under review by the Commission. The BOTCC also has taken action with regard to option margins, increasing the amount of margin collected for deep out-of-the-money options.

o Increased use of intra-day margin calls. The CFTC's Financial Follow-up Report reflects that the futures margin system functioned effectively as a protection of the financial integrity of futures transactions during the week of October 19-23. Nonetheless, the Commission staff's analysis indicated that the potential burdens imposed upon the clearance and settlement system by the necessity to effect variation margin transfers of the magnitude called for during the week of October 19-23 warrants consideration of the use of intra-day margin calls on a routine or more frequent basis by all clearing organizations. Previously, only the BOTCC routinely made intra-day margin calls.

The CME has recently adopted a rule amendment to facilitate implementation of a new policy of its Board of Governors to make intra-day margin calls on a daily basis, when a specified dollar threshold is crossed, and to facilitate the flow of funds by paying out gains as well as collecting payments for losses on an intra-day basis. New procedures promulgated by the CME for the collection and payment of variation margin on an intra-day basis provide for issuance of intra-day calls for settlement variation to any clearing member owing more than \$500,000 and for intra-day payments of up to 80 percent of gains when \$1,000,000 or more is owed a clearing member. The CME also has stated its intention to coordinate the timing of intra-day margin calls with other clearing organizations in order to alleviate potential burdens on clearing member firms that have related positions in different markets. The CME also has adopted a rule amendment to provide greater flexibility to the clearing organization with regard to the timing of daily settlement payments.

The BOTCC, which had a pre-existing policy of making routine intra-day margin calls based on the open interest at the previous day's close, adopted additional margin collection procedures following the October market events to enhance its margin collection process. Under these new procedures, the previous evening's trades and all trades submitted to the BOTCC by approximately 1:30 p.m. each day are matched, and appropriate variation margins are collected by 2:30 p.m. each day on all open positions as of 2:00 p.m. In addition, the BOTCC established procedures to ensure that afternoon variation margin payments are

paid only to a clearing member if the clearing member's required margins, based on intra-day positions, are sufficient to cover the newly calculated risk of those positions.

o Enhanced clearing and settlement bank financial data. In accordance with Commission staff recommendations, the CME Clearing House has augmented its risk management audit procedures, expanded the range of "large-trader" financial information that will be available on a short-term basis, and will be requiring additional intra-day mark-to-market calculations to assess the impact of price moves on positions held by clearing members. The CME also has scheduled a round-table discussion in April 1988 with representatives of the BOTCC, OCC, Federal Reserve Bank of Chicago, and the four clearing banks used by the BOTCC and the CME Clearing House to address subjects including CME emergency plans and procedures, the appropriateness of expanding Fedwire hours, improving coordination among the exchanges and settlement banks, and revisions to agreements between clearing organizations and settlement banks. Some of these settlement refinements were also suggested for further consideration by the CFTC staff in the Financial Follow-up Report and the Final Report.

o Clearing member capital. The CME has stated that it intends to enhance the security of its Clearing House by establishing additional minimum capital prerequisites for membership in the CME Clearing House.

Actions by Exchanges--Price Limits

One of the circuit breakers discussed most frequently since the events of mid-October is daily price fluctuation limits. Generally, futures price limits prohibit trading at prices a specified level above or below the previous day's settlement price. As discussed in more detail in the CFTC's Final Report (pp. 182-86), proponents of limits contend that they prevent the markets from overreacting during periods of uncertainty and constrain the daily financial exposure of FCMs and clearing members. The disadvantage of such limits is that, when they are reached and markets are prevented from finding the market clearing price, large amounts of orders can remain unexecuted or be

diverted to other markets. In addition, limits impede the price discovery process of futures markets and can result in intermarket distortions when comparable limits do not exist for related markets.

Although price limits were at one time uniformly in effect for every actively traded futures contract, in recent years there has been a tendency toward relaxation or removal of price limits in many futures markets. On October 19, 1987, there were no price limits in effect for any actively traded stock index futures contract. By October 23, however, the CME, New York Futures Exchange (NYFE), and Kansas City Board of Trade (KCBT), by emergency actions, had put into effect price fluctuation limits for their actively traded stock index contracts. The fourth exchange with stock index futures trading activity, the CBT, did not implement limits on an emergency basis. Subsequently, the Commission approved permanent limits for the CBT's, CME's, and KCBT's actively traded stock index contracts. More recently both the CME and CBT proposed further rule amendments that were approved by the Commission in February 1988. A summary of the current price limit rules, by exchange, follows:

Chicago Mercantile Exchange. The CME's daily price fluctuation limits for the S&P 500 futures contract are contingent upon the level of futures prices as determined by the settlement price of the near-by future at the end of the prior calendar month as follows:

<u>Lead Month Settlement Price on Last Business Day of the Preceding Month</u>	<u>Daily Futures Price Limit for the Current Calendar Month</u>
(index points)	
0.00 up to 275.00	15.00
275.05 to 325.00	20.00
325.05 and above	25.00

The CME's S&P 500 futures rules also provide for a narrower opening period price limit of 5.00 index points, above or below the previous day's settlement price, which applies during the first ten minutes of trading. When any of the aforementioned price limits for the S&P 500 futures contract are in effect, the CME rules provide for the suspension of trading in the option on the S&P 500 future as well. ^{1/}

Chicago Board of Trade. The rules of the CBT regarding the MMI futures contract specify a daily price fluctuation limit of 20 points above or below the previous day's settlement price. This limit is expanded to 30 points the next day in the event that

^{1/} The Commission is currently reviewing additional rule amendments proposed by the CME that would refine these opening period price limits and redefine the lead month. The proposed amendments generally would provide that the opening period price limit would cease to be in effect if the futures contract trades off the limit prior to the end of the first ten minutes of trading. Further, there would be a two-minute trading halt if the futures contract remains bid or offered at the five-point limit at the end of the first ten minutes of trading. Under the proposal, the lead month would be the most actively traded future.

three or more contract months close at the limit. There is no option on the MMI traded on the CBT.

Kansas City Board of Trade. The rules of the KCBT for the Value Line Average (VLA) futures contract specify a daily price fluctuation limit of 35 points. This limit also contains an expansion factor to 50 points after two consecutive daily price limit moves in the same direction in the lead month. The option on the VLA future is not actively traded.

New York Futures Exchange. The emergency action taken by NYFE in mid-October regarding price limits expired in January, and no permanent rules have been implemented to replace those limits for the NYSE Composite futures contract. Currently, the open interest in this contract, although second to the CME's S&P 500 futures contract, accounts for less than three percent of the total face value of open contracts in stock index futures.

In analyzing the price limits imposed by the exchanges on various stock index contracts, the Commission focused on the recent experience of stock market prices--including the period of mid-October 1987. Based on that analysis, the specified levels appear to represent an appropriate balance between the positive and negative aspects of price limits described above. For instance, for the actively traded S&P 500 futures contract, which accounts for about ninety-five percent of the total market value of all open stock index futures contracts, the analysis shows

that the multi-level limits now in place would have been in effect infrequently during the thirteen-month period from January 1987 through January 1988. However, these price limits would have had a substantial impact on futures settlement prices in mid-October 1987, and on those days when the daily price limits would have been reached, those limits would have constrained stock index futures prices significantly relative to the prices that prevailed at the end of those trading days. In addition, the CME's new price limit for the opening of the S&P 500 futures contract would have been reached each day during the week of October 19-23.

Actions by the CFTC--Financial Integrity of Futures Markets

Subsequent to October 19, the Commission took immediate action to assess the operation of regulatory and self-regulatory financial protection systems during the October market break. The staff's preliminary financial oversight analysis is summarized in the Interim Report on Stock Index Futures and Cash Market Activity During October 1987 (Interim Report), which was prepared on an expedited basis and presented to the Commission on November 9, 1987. Thereafter, the Commission took a number of other actions to assess the operation of CFTC and futures SRO financial regulatory systems during the market break, to identify measures that could be taken to reinforce the capacity of existing financial systems to respond to extreme market volatility, and to stimulate self-regulatory organizations to review and

enhance their own programs to augment available financial protections. These actions include the following:

- o Development of follow-up data concerning the financial impact of the October market break upon futures firms and futures customers. To assess the effectiveness of financial protection systems during the October market break, the Commission's staff issued a special call, pursuant to CFTC Regulation 1.10(b)(4), for financial reports by all FCMs as of October 31, 1987, collected survey data from twenty-three FCMs, which carried approximately two-thirds of total futures customer equities, concerning such matters as customer defaults and position liquidations, and analyzed notices filed by FCMs pursuant to the Commission's financial early warning reporting system. 2/ The staff's findings based upon these data are summarized in the Financial Follow-up Report.

- o Review of the operation of clearing organization systems for the collection and payment of margin. As part of its post-market break financial oversight review, the Commission's staff also reviewed the operation of clearing organization systems for the collection and payment of margin. This analysis included a review of the amount, frequency, and results of daily and intra-day margin calls issued by the CME Clearing House and by the BOTCC, a review of contractual relationships between clearing organizations and their settlement banks, and an inquiry into the operation of settlement and banking systems relevant to the flow of margin funds during the week of October 19-23. The staff's findings based upon these data are summarized in the Financial Follow-up Report.

- o Review of customer complaint data. The Commission's staff also surveyed those futures exchanges which trade stock index contracts, the National Futures Association, and the Commission's Complaints Section to collect data concerning customer complaints relating to futures activity during the

2/ CFTC Regulation 1.12 establishes a financial early warning system which requires, among other things, that FCMs notify the Commission and their designated self-regulatory organizations of capital impairment and other specified conditions that constitute or could lead to financial deficiencies, including a failure to maintain adjusted net capital equal to at least 150 percent of the greater of the required minimum of the applicable self-regulatory organization or of the Commission.

market break. The staff's findings based upon these data are summarized in the Financial Follow-up Report.

- o Issuance of financial oversight conclusions and recommendations. Based upon its analysis of financial data collected following the market break, the Commission's staff prepared the Financial Follow-up Report summarizing its findings and recommendations relating to federal regulatory and industry self-regulatory financial protections in the futures markets. The staff's recommendations addressed several measures, including implementation of the margin pay and collect information-sharing system, increased use of intra-day margin calls, and clarification of contractual relationships between clearing organizations and clearing banks, which are reflected in the exchange actions previously summarized.

- o Self-regulatory program reviews. Following the market break, the Commission's staff initiated a review by the futures SROs to identify measures that could be taken to reinforce existing financial protections against extreme market volatility. In correspondence with each exchange and clearing organization, CFTC staff requested that each SRO consider potential program enhancements to strengthen protections against future periods of volatility and preliminarily identified seven program areas for priority consideration. These program areas included such matters as implementation of the pay and collect data-sharing system, integration of market surveillance data into SRO computerized financial surveillance systems, and enhancement of SRO audit programs to ensure that member firms have the capability to monitor and maintain continuous capital compliance. Commission staff subsequently met with the Joint Audit Group, a self-regulatory council on which all futures exchanges and the National Futures Association are represented, to discuss the staff's recommendations in each program area. SRO responses to the Commission staff's recommendations have generally been positive. The Commission and its staff continue to consult with the SROs to stimulate progress toward program enhancements recommended following the market break and to monitor SRO responses to the Commission's financial recommendations.

- o Establishment of centralized computer base for FCM financial data. In the Financial Follow-up Report, Commission staff recommended that FCM financial data be maintained routinely in a computerized data base that would be accessible to CFTC staff as well as to all SRO financial surveillance staffs. The Commission currently maintains financial information filed by FCMs in hard copy and computerizes a limited portion of such data. Currently, discussions with the futures SROs concerning establishment of such a data base are underway, and Commission staff is developing appropriate computer systems.

- o Enhancement of financial surveillance data systems. The Commission's staff is also assessing measures that could be

taken to refine existing data, including large-trader data and exchange clearing member position data that are collected and used by the Commission and the futures exchanges for market and financial surveillance, to facilitate more effective financial surveillance. Such measures include enhancement of existing systems to produce aggregate intermarket position data for CFTC-regulated markets. Such aggregate data could be made available to exchanges and other regulators during periods of volatile markets to identify concentrations of similar or related positions in futures held by customers and/or by clearing firms on multiple exchanges that could pose a financial threat to a clearing firm. Such intermarket position data would be useful not only to the futures SROs but, where firms or customers also are involved in the securities markets, to the Securities and Exchange Commission (SEC) and the securities SROs. Once established, such a program could provide a model for routine compilation of data to permit ongoing, daily assessments of full intermarket exposures, including domestic and foreign securities as well as futures positions.

Actions by the CFTC--Surveillance Data

The Commission is moving on several fronts to ensure that more complete and timely data are available for analysis in the event of continued volatility in the stock market. First, each commodity exchange currently maintains a daily record of each trade (trade register) with certain identifying information. This information includes the name of the firm clearing the trade and a customer-type indicator (CTI) that shows the type of account for which the trade was executed. 2/ Commission staff is exploring ways to use this daily record of trades to identify

2/ The CTI code identifies whether a trade was executed for the floor broker making the trade, the firm clearing the trade, another floor broker or member, or a customer.

more rapidly and accurately specific types of transactions involving both futures and stock trades, such as index arbitrage.

In the short run, consideration is being given to requiring additional CTI codes for stock index futures transactions to identify various types of transactions. The advantages of this approach are the short time required for implementation and the low cost due to the slight changes to current computerized records that would be required.

For the longer term, the Commission is exploring with the exchanges and FCMs changes and additions to account-number information. It may be possible, for example, to require that the account number for a trader be recorded on the trade register and that this number be the same as the number provided to the Commission and the exchanges for their respective large-trader reporting systems. While some exchanges currently have account numbers in their trade register data, the exchanges do not have specific requirements regarding such use of account numbers. Such requirements would allow the rapid identification of traders' timed transactions and the integration of those data with other information collected through the Commission's or the exchanges' large-trader reporting systems. Preliminary discussions with several exchanges indicate, however, that this latter approach requires significant preparatory analysis since it could necessitate industry-wide changes to existing accounting systems.

With respect to the CFTC's large-trader reporting system, Commission staff has implemented a special identification system for tracking institutional accounts. The staff also is reviewing the levels at which the positions of large traders in stock index futures currently are reported to the Commission in terms of the proportion of open interest represented by reporting traders and the numbers of traders being reported. If appropriate, proposals to lower these reporting levels will be published in the Federal Register for public comment.

THE COMMISSION'S EMERGENCY POWERS

In addition to the authority to support the foregoing regulatory initiatives, the Commission also has broad statutory authority to take emergency action in extraordinary circumstances. This authority includes the power to halt trading in one or more futures contracts or to resume trading if the Commission determines it is appropriate to do so.

In 1974, Congress enacted Section 8a(9) of the Commodity Exchange Act, which authorizes the Commission

to direct [a commodity exchange] whenever it has reason to believe that an emergency exists, to take such action as, in the Commission's judgment, is necessary to maintain or restore orderly trading in, or liquidation of, any futures contract.

In approving this compromise version of Section 8a(9) which was enacted into law, the House and Senate conferees emphasized that "[t]he effective use of the emergency powers requires the careful exercise of expert and impartial judgment by the Commission." 4/

The Commission's long-standing policy in emergency situations is that the exchanges should act in the first instance. As a result, the Commission has found it necessary to take emergency action on only four occasions. Thus, the Commission has acted consistent with the Congress's intent that it balance various broad public interests--including the desire for minimal government intervention in the markets--against the need for carefully selected but effective federal action to assure a sound and viable marketplace.

In reauthorizing the Commission in 1978, 1982, and 1986, the Congress has favorably reviewed the Commission's approach to the use of its emergency authority. In 1982, the Congress expanded Section 8a(9) expressly to confirm that the Commission's emergency powers included, but were not limited to, "the setting of temporary emergency margin levels on any futures contract, and the fixing of limits that may apply to a market position acquired in good faith prior to the effective date of the Commission's action." 7 U.S.C. 12a(9)(1982).

4/ Senate Report No. 1194, 91d Cong., 2d Sess. 38 (1974).

In addition to empowering the Commission to take "such action" as the Commission judges will restore or maintain orderly trading, the Congress also has provided a broad definition of an emergency in Section 8a(9). Specifically,

The term 'emergency' as used herein shall mean, in addition to threatened or actual market manipulations and corners, any act of the United States or a foreign government affecting a commodity or other major market disturbance which prevents the market from accurately reflecting the forces of supply and demand for such commodity

In deciding whether to invoke its emergency powers under this definition, the Commission has paid particular attention to price and other factors in the cash markets for the underlying commodities on which the futures contracts are based.

While previous Commission emergency actions have involved agricultural products, it is clear that the Act's definition of emergency extends to developments in the underlying markets for financial commodities, such as government securities and cash-settled equities indexes. In this regard, in 1978, the Congress added Section 2(a)(8)(B) to the Act to specify that the Commission, in considering possible emergency action under Section 8a(9) affecting futures contracts involving any security issued or guaranteed by the United States, should evaluate the comments it receives from the Treasury Department and the Board of Governors of the Federal Reserve System. The Commission also would apply this policy to comments received from these agencies,

as well as the SEC, if the Commission were to consider emergency action involving stock index futures contracts.

COORDINATION EFFORTS SINCE OCTOBER 19, 1987

Communication and coordination among the CFTC, the SEC, the Federal Reserve Board and other financial regulatory agencies, as well as among the securities and futures exchanges, was already well established prior to October 19. Building upon that foundation, interagency and interexchange coordination was excellent during the week of October 19, as noted in both the Report of the President's Task Force on Market Mechanisms and the General Accounting Office's preliminary report. ^{5/} Of course, any system-wide shock is likely to suggest areas where enhancements can be made. In the weeks and months since October 19, a variety of efforts have been undertaken to enhance coordination mechanisms and formalize communications systems that worked well on an ad hoc basis during the market break and to develop contingency plans to deal with possible market crisis situations that may arise in the future.

On October 27, 1987, Acting Chairman Hineman, Chairman Ruder and members of their senior staffs met to discuss improved

^{5/} For details concerning the CFTC's part in these coordination efforts, see pp. 29-34 of the CFTC's Interim Report on the October market events.

interagency liaison. The next meeting among the same parties, on November 12, 1987, resulted in an agreement to increase the frequency of meetings among SEC and CFTC senior staff members to discuss matters of mutual interest and the preparation and distribution of a "crisis management phone book" listing the names and phone numbers of key persons at the securities and futures exchanges and financial regulatory agencies.

Acting Chairman Hineman met again with Chairman Ruder on December 21 and with Chairman Greenspan on January 8 to discuss interagency coordination issues. On January 13, Acting Chairman Hineman met with the leadership of the Chicago Mercantile Exchange and the Chicago Board of Trade to discuss issues related to the October market events, including ways of enhancing interagency and interexchange coordination. On January 21, Acting Chairman Hineman discussed the same issues, particularly better coordination among the exchanges and institutional users, with the President of the New York Futures Exchange, the President of the New York Stock Exchange, and the Chairman of the Futures Industry Association. Also, on January 11, the heads of the securities and futures SRO's met in New York to discuss methods of improving communications.

Chairman Ruder, Acting Chairman Hineman and staff members of the two Commissions met again on February 9. Items on the agenda included contingency plans for market emergencies, information sharing, margins, circuit-breaker mechanisms, intermarket front

running and participation of futures exchanges in the Intermarket Surveillance Group (ISG).

On February 10, Acting Chairman Hineman and Chairman Ruder met with John Phelan, Chairman of the New York Stock Exchange and Leo Melamed, Chairman of the Executive Committee of the Chicago Mercantile Exchange. Based on discussions at this meeting, the CFTC and SEC wrote to their respective exchanges asking them to give immediate consideration to the related areas of inter-exchange information sharing on a routine or continuing basis and flexible contingency planning for emergency situations. The CFTC request was sent to the four futures exchanges that have active stock index futures contracts. That request asked the futures exchanges to advise the Commission concerning

[W]here you believe improved procedures are needed to facilitate the prompt sharing of accurate market and financial information among the securities and derivative market self-regulatory organizations.

All of the responses of the futures exchanges noted that a substantial amount of interexchange coordination already exists, particularly regarding surveillance of the financial condition of FCMs and broker/dealers. Nevertheless, the four futures exchanges also saw the need for additional efforts by futures and securities exchanges to enhance interexchange information sharing and emergency coordination. Several exchanges offered specific suggestions to achieve that end, including the prompt convening

of meetings among the exchanges to discuss these issues and the development of a formal interexchange group through which they could address financial and market surveillance issues on a routine basis.

There are two specific areas in which the futures exchanges believe improvements are needed. One is in obtaining prompt access to relevant securities position and transaction information to be used in conjunction with available futures market surveillance data to augment the futures exchanges' financial and market surveillance. The futures exchanges also noted their need for advance notice of emergency actions by other exchanges, particularly market closings, and of the facts necessitating those actions so that coordinated responses can be implemented when appropriate. On February 24, representatives of securities, options and futures exchanges trading stock index products met to discuss technical issues related to cooperation and information sharing. These exchanges are currently exploring a "hotline" system involving dedicated telephone lines which would allow any exchange to communicate with all other exchanges simultaneously.

On March 16, SEC and CFTC staff led a meeting of representatives of securities exchanges and futures exchanges that trade stock index products, to discuss areas where better interexchange sharing of market information is needed. Additional interexchange meetings that have been scheduled include: a March 24 meeting, hosted by CBOE, to discuss improved information

dissemination such as wider automatic availability of data on the status of individual NYSE stocks; a March 25 meeting of exchange clearing organizations to discuss the types of financial data that should be shared regularly and otherwise; and a meeting among exchanges and banks the first week of April to discuss flow of funds and credit questions relating to exchange margin calls.

On February 26, a meeting was held at the Federal Reserve Board among Chairman Greenspan and Vice Chairman Manuel Johnson; Chairman Ruder of the SEC; Commissioner Hineman and myself, as Chairman of the CFTC (I had been sworn in earlier that week); and senior staff members of the respective agencies. The discussion covered, among other issues, plans to formalize the ad hoc communications procedures that worked well during the October market break and enhanced information sharing. The agency Chairmen appointed staff members to an interagency group that would meet to work out the details of improving coordination and information sharing procedures. That staff group held its initial meeting on March 7.

In addition, as previously mentioned, there have been a series of meetings and letters aimed at enhancing futures exchanges' participation in the ISG. Futures exchanges have participated informally in meetings of an ISG subcommittee for several years. On January 15, 1988, Acting Chairman Hineman wrote to the outgoing Chairman of the ISG in support of greater futures exchange participation in the deliberations of the ISG,

whether through formal membership or otherwise. In a January 25 letter, the ISG Chairman responded that futures exchanges and CFTC representatives had been invited to, and would attend, the ISG's January 28 annual meeting. On February 4, the new Chairman of the ISG wrote to the presidents of those futures exchanges that trade stock index futures enclosing a copy of the ISG's basic operating agreement for their review as a prelude to exploring a more formal affiliation between the futures exchanges and the ISG. In addition, on February 12, Chairman Ruder wrote to the Chairman of the ISG to encourage him to facilitate participation by futures market self-regulatory organizations in relevant ISG subcommittees. Recently all four of the futures exchanges which trade stock index futures have indicated a willingness to join ISG. The next ISG meeting is in Washington on April 5.

The agencies are continuing to encourage enhanced communication among the exchanges, including particularly the sharing of information on market conditions and financial risk related to intermarket positions. Further interagency meetings not listed here have taken place at the staff level to discuss, among other issues, intermarket frontrunning.

The Commission also recognizes that futures markets are international markets and is continuing its efforts to improve regulatory cooperation and information sharing on the international level as well. Commission senior staff members attended

an international meeting of regulators having responsibility for securities and derivative products (the "Wilton Park Group") in the United Kingdom on February 17-19. Participants discussed market events and enhanced cooperative enforcement and information exchange. On March 9, the Commission's senior staff and I, as Chairman, hosted an international futures regulators meeting in Boca Raton. Officials representing regulatory agencies from the United Kingdom, France, Switzerland, Hong Kong, Malaysia, Australia and Canada were present. The agenda included the Commission's new foreign futures and option regulations, the events of October 19 and the need for enhanced financial and market information sharing, as well as enforcement-related information sharing. As futures trading has developed in other nations, foreign government regulators have spent much time with the CFTC learning how our regulatory system functions. The March 9 meeting is one of regularly scheduled twice-yearly international meetings among futures and option regulators which have been going on for several years.

CLARIFICATION OF CERTAIN ISSUES DISCUSSED AT THE HEARINGS

Program Trading and Index Arbitrage

Despite all that has been written and said about the events of October 1987, there is still apparent disagreement as to the characterization of various trading strategies prevalent at the time. A variety of disparate strategies have been labeled as

"program trading," and it has been asserted erroneously that all or most of such trading is related to stock index futures markets.

In fact, program trading is simply the simultaneous purchase or sale of a basket of stocks. As such, it is not a new concept, although recent advances in automated order routing systems have facilitated the rapid transmission and execution of orders for baskets of stocks in normal market circumstances. For example, if a mutual fund or a pension fund wished to sell a portion of its diversified equity portfolio, it could do so through a sell program on the New York Stock Exchange (NYSE), often using the NYSE's automated routing system called "Super DOT."

"Index arbitrage" is a special form of program trading that involves related trades in stocks and stock index futures or options. Such strategies, which are most commonly executed by or for pension or endowment funds and large securities broker/dealers, involve nearly simultaneous purchases or sales of baskets of stocks and the taking of equal and opposite positions in stock index futures or option contracts. Arbitrage activity is designed to capture a profit from price disparities between the stock market and the related index contract; arbitrage functions to reduce intermarket price disparities, thereby maintaining a proper economic relationship between the stock and index derivative markets.

Another form of program trading has been termed "portfolio insurance." This trading strategy is a specialized type of portfolio hedging that is designed to shift the allocation of a fund's portfolio out of stocks and into cash or bonds to protect the portfolio from a decline in stock market prices. Portfolio insurance has been characterized as a disciplined form of entering stop-loss orders that can be carried out in either the securities or derivative markets. The strategy calls for increasing short positions in stock index futures or the sale of stocks after the market begins to fall, and calls for offsets of short futures positions or purchases of stock when the stock market rises to replicate the risk-return characteristics of a purchased put. While portfolio insurance originally was designed for execution in the stock market, during the two or three years preceding October 1987 the low transaction costs and high level of liquidity in the stock index futures market resulted in most portfolio insurance being executed in the futures rather than the stock market.

In sum, program trading is first and foremost a stock market strategy and is not restricted to index arbitrage or other futures-related trading strategies. The Commission staff's Final Report carefully distinguishes the different forms of program trading to assess their relative importance during that period. The Final Report focused on the potential interaction in the futures market of index arbitrage and portfolio insurance trading to determine whether there was any evidence that the price

volatility in the stock market was caused by the much publicized "cascade scenario."

As described in the CFTC Final Report, index arbitrage accounted for only about 6 percent of total NYSE volume on October 19, a relatively low amount in comparison with previous days of stock market declines that have been studied. The greatest concentration of index arbitrage sell programs occurred during the first hour of trading that day. Despite large reported futures price discounts and rapidly falling stock prices after 2 p.m., index arbitrage trades diminished significantly after that time. In the days following October 19, index arbitrage was an insignificant percentage of NYSE volume due to NYSE actions to curtail that type of trading. Despite such curtailment, stock prices remained volatile during the following days, and no substantial sustained price recovery occurred, supporting the finding that index arbitrage was not the cause of the stock market's collapse.

Although portfolio insurance and other hedging activities in stock index futures were substantial on October 19, there was no correlation among high concentrations of index arbitrage, portfolio hedging and the largest intraday periods of price weakness. While index arbitrage sell programs were concentrated during the first hours of trading on October 19, portfolio hedging using futures was relatively constant throughout the day.

Furthermore, program trading of stocks without a futures market counterpart, *i.e.*, non-arbitrage sales of baskets of stocks, accounted for a larger proportion of total stock sales on October 19 than did futures-related program trading of stocks, *i.e.*, index arbitrage. During the first half hour of trading, for example, one mutual fund group entered stock sell orders for 17.5 million shares; this compares to 6.2 million shares of index arbitrage sell programs entered during the same time period. For the day, that mutual fund group sold 25.8 million shares of stock, compared to 37.5 million shares sold for all index arbitrage programs and a total NYSE volume of 608 million shares. In addition, for the entire day other program sales of stocks, without futures market counterparts, totalled nearly 52 million shares, and those other program stock sales were larger than index arbitrage for every half-hour interval after 10:30 a.m. Clearly, contrary to some reports, futures-related program trading was not the dominant selling pressure on the NYSE on October 19. The timing and magnitude of index arbitrage and portfolio insurance activities in the futures market during the October market break do not provide evidence to support the cascade hypothesis.

Differential Leverage Between Stocks and Futures

The purpose of futures margins is to protect the financial integrity of the futures markets, and during the October market break the futures margining system served its purpose well, as

attested to by all of the official commentaries on stock market events during mid-October. Nevertheless, the Securities and Exchange Commission and others have asserted that stock index futures margins should be raised. Although a variety of reasons for that proposal have been advanced, the most prevalent argument has been that margins for stock index futures, as well as for stock index options, permit greater leverage than do the margins applicable to stock purchases and short sales.

First, there is no evidence that leveraged futures positions contributed to the collapse of stock prices in mid-October. If the CME's S&P 500 futures market in mid-October had consisted of many large, leveraged long positions, such positions theoretically could have contributed to the price collapse. This could have arisen if futures traders had been forced to liquidate their outstanding long futures positions instead of meeting large variation margin calls. However, neither the Commission's large trader data nor the Commission's review of the financial events accompanying the October market break indicate such liquidations.

On October 19, 1987, open interest in the S&P 500 futures contract increased by about 26,000 contracts, rather than decreased. The number of reporting futures traders, the vast majority of whom are broker/dealers or institutional investors, also increased from 148 on October 15 to 186 at the close of business on October 19. These statistics do not support the occurrence of forced liquidations of leveraged positions.

Second, as the CFTC's large-trader data indicate, the S&P 500 futures contract is primarily an institutional market, and its principal users do not have leveraged positions. On October 19, reporting commercial traders ^{6/} held about 70 percent of the total open interest. Most commercial traders in stock index futures markets are institutional investors, principally pension funds or broker/dealers, that are engaged in index arbitrage or are hedging their stock market risk. In contrast, large speculators, who are subject to position limits in the S&P 500 futures market as in all futures markets, held less than 5 percent of the total open interest in mid-October 1987. Thus, in the stock index futures market there is a notable absence of large speculative positions that could be indicative of differential leverage between the stock and futures markets.

On the other hand, the futures positions of hedgers and other commercial users of stock index futures generally are not leveraged. Most have equivalent offsetting positions, normally in the stock market but also in other derivative markets. Thus, a rapid change in stock prices would be offset by an offsetting change in the value of the related futures positions and, as a result, should not create a significant deficit in the combined

^{6/} Under CFTC regulations a reporting commercial trader in the S&P 500 futures market is one who has a position exceeding 300 contracts and who has indicated that use of the contract is for hedging or arbitrage purposes.

stock and derivative market positions of commercial traders. Under such circumstances, futures margin calls may create at most short-term liquidity demands, not solvency concerns. Consequently, it makes no sense from the standpoint of either financial integrity or leverage to adopt a Federal policy of higher initial margins for the stock index futures positions of institutions which have offsetting stock positions.

Further, since the stock index futures market is primarily an institutional market, the 50 percent initial margin requirement of the Federal Reserve Board for public customers is not generally the pertinent figure for comparison to futures margin levels from the standpoint of relative market leverage. In this regard, it is noteworthy that stock exchange specialists and other equities market makers are exempt from the Federal Reserve Board's 50 percent stock margin requirement. Instead, they pay a good faith margin, set by their creditors and related to financial (rather than leverage) requirements. Such deposits are normally 20 to 30 percent (but can be lower) of the current market value of the stocks they are carrying. Furthermore, when the specific mechanics of the futures and securities margining systems are compared, taking into account the futures industry's requirement of daily payments of all contract price changes, one can view the futures margining system as more rigorous during periods of market volatility than the credit system that applies to securities transactions.

Customer margins for futures contracts, which apply to both long and short positions, have two elements, initial margin deposits and variation margin payments. Initial and maintenance margin levels determine the amount of good faith deposit that, respectively, is paid upon taking the position and is maintained on deposit with the FCM while the futures contract is open. If the equity in the customer's account falls below the maintenance margin level, the futures customer receives a margin call to deposit additional funds to restore the account's net equity to the initial margin level. In addition, variation margin must be paid to the clearinghouse by each trader's clearing member to cover any losses on a daily, pay-as-you-go basis. Thus, to maintain a futures position a customer must always have on deposit with his or her FCM an amount equal to at least the maintenance margin level, and that firm must be able to pay out, each day and in cash, 100 percent of all losses in the value of the contract to the clearinghouse.

In contrast, securities customers have only to make a down payment on the purchase price of the stock and can finance the rest of the purchase. The customer may be able to wait as long as five days to make his down payment and does not have to make good on losses daily. For stocks, maintenance margin calls are made only after the value of the stock has dropped so that there remains only a 25 percent, as opposed to a 50 percent, down payment. Because of these essential differences between the futures and securities margining systems, a simplistic comparison

of initial margin requirements for securities and futures positions of roughly comparable value can lead to erroneous conclusions.

For example, under the securities margining rules, an investor/speculator not eligible for an exemption under Regulations T or U would be required to deposit \$75,000 to purchase a \$150,000 portfolio of stocks. Under these rules the firm carrying the stock purchaser need not make a downpayment until the settlement date, which is the fifth business day after the trade date. Thus, the stock trader may not have to deposit any money for the first four days, and no further margin payments would be required unless the stock portfolio's value declined below \$100,000. In the event that occurred, the securities trader would normally have five business days to provide funds (although this could be up to fifteen days under special circumstances) equal to the decline in the value of the stock position below \$100,000.

In contrast, in October 1987 a long speculative futures position in the S&P 500 futures contract with, for example, a face value of \$150,000, would have required an immediate deposit of \$15,000 initial margin. A 33-1/3 percent decline in the contract's value to \$100,000 would lead to total margin collection of \$65,000, *i.e.*, variation margin calls of \$50,000 plus the initial margin of \$15,000, and the futures margin calls would require payment as the losses were realized. Clearly, payments

against a losing futures position can be substantially more than the initial futures margin, and the immediacy of the futures margin system makes it a financially secure one.

Frontrunning

Futures, securities, and securities option exchanges have rules that generally prohibit acts in violation of "just and equitable principles of trade." The futures exchanges that trade stock index contracts, as well as the securities and securities option exchanges, take the position that frontrunning involving such contracts can constitute a violation of those exchange rules. The antifraud and antimanipulation provisions of the Commodity Exchange Act and the Federal securities laws also may be applicable to particular instances of frontrunning.

The CFTC believes the ISG is an appropriate forum for facilitating the timely and effective communication of market surveillance data related to trading patterns of possible frontrunning activity among all exchanges with common self-regulatory interests. In addition, CFTC staff is considering the possibility of a regulation establishing a more specific futures industry standard for the prohibition of intermarket frontrunning activity involving transactions on futures exchanges.

CFTC staff has reviewed the "Manipulation and Frontrunning" section of the SEC staff's report, The October 1987 Market Break (SEC Report, pp. 3-28 - 3-34) and has obtained from SEC staff the related data considered by that staff. Basically, that section of the SEC Report addresses three types of trading activity involving futures markets. Although CFTC staff continues to review this information, the following are brief preliminary comments regarding each of the three types of activity referred to by SEC staff. The first type of trading activity discussed by the SEC staff involving market manipulation is based solely upon a hypothetical scenario. No data were provided by the SEC, and the CFTC staff was informed that this analysis was not based on observations by the SEC of specific trading activity.

Second, the SEC staff refers to certain "Frontrunning of Customer Futures Sales." The referenced activity did not occur in two markets and therefore would not constitute intermarket frontrunning. Instead, the activity described and the data related thereto pertain to possible trading ahead of customer orders by proprietary accounts within a single futures market. Trading ahead of customer orders in futures markets long has been prohibited by rules of all futures exchanges, as required by CFTC regulations, and by the antifraud provisions of the Commodity Exchange Act, and such activity has been prosecuted by futures exchanges and the Commission. Further, CFTC staff's review of the SEC data thus far raises questions regarding whether trading ahead in fact occurred.

Lastly, SEC staff discusses "Firm Selling at the Opening," that is, proprietary trading in stock index futures markets before the opening of component stocks. The SEC staff, noting that the activity cited in its report was not "classic frontrunning," indicated to CFTC staff the limited futures market trading data the SEC staff had reviewed, but they did not provide data reflecting or identifying any related stock market activity. Nonetheless, CFTC staff continues to review all of the futures trading specifically referenced by the SEC to determine if any violative activity occurred.

CONCLUSION

The members of the Commodity Futures Trading Commission believe that additional legislative authority is not necessary to enable this agency to respond to problems of the type that occurred during the October 1987 market break. The Commission's existing regulatory authority, under which a number of initiatives already have been taken, and its broad statutory emergency powers are sufficient to allow it to respond to problems arising in futures markets.

With respect to intermarket and/or interagency concerns, we believe those issues are most appropriately addressed by the regulatory and self-regulatory agencies directly involved. Intermarket and interagency cooperation and contingency planning in addressing these issues is progressing well. The Congress,

and particularly the committees with jurisdiction over the agencies involved, have already provided a healthy impetus to this process and can help to assure its ultimate success by lending their full support and encouragement to these interagency, interexchange coordination efforts.

I trust you will find this document responsive to the Committee's concerns. As we indicated to your staff by telephone, I will be appearing before the Committee on March 31.

Sincerely,

Wendy Gramm
Wendy L. Gramm
Chairman

Mrs. GRAMM. Many issues are already being addressed through refinements and enhancements to the futures regulatory system as described in our March 18 letter.

CHANGES HAVE BEEN PUT IN PLACE

Much has been done since October 19 by the exchanges, CFTC, and SRO's. These changes enhance the ability of futures markets to work well even during periods of extreme price volatility.

These changes include: (1) reinforcing the ability of futures markets to withstand the financial pressures of extreme price volatility; (2) enhancing information sharing and information systems to allow better monitoring during times of stress and to improve the efficiency of the payments systems; (3) improving coordination and communication among exchanges, the SRO's and the regulators, including the international regulators; (4) putting in place some circuit breaker mechanisms for emergencies.

Now you've heard about the Working Group on Financial Markets that has been established. It is indeed working and I hope our efforts, along with the other efforts by the exchanges and the SRO's, will be afforded your support. We need some time to give both the various exchanges and various clearinghouse coordination efforts, as well as our own working group efforts, a chance to work. Congressional interest has certainly given these cooperative efforts a healthy impetus. But to initiate legislation at this point would force exchanges and regulators to turn their attention away from the ongoing coordination efforts and focus instead on the legislative process, thereby perhaps causing delay in addressing important issues until the effect of the legislation is finally determined.

This is particularly so with proposals that call for the creation of new layers of regulation and new lines of regulatory authority.

The Congress has created an expert agency to oversee the capital formation in the United States. The Congress created another expert agency to regulate the price-risk transfer function of futures markets. The securities laws in the early 1930's and the law first establishing futures regulation in the 1920's are examples of functional regulation upon which the Congress and the administration have agreed for over half a century. I suppose I should mention the Federal Reserve Act, which was in 1913 as well.

No evidence, including information from the October market break period, has been presented to justify such a drastic departure from this existing regulatory approach.

Mr. Chairman, Congress has given this country a sound and sensible regulatory framework for its markets based on the concept of regulation by function. That sound framework enabled the various marketplaces and participants to withstand the most significant reversal of investor attitudes in history. As expert regulators, each of us has ideas to refine and enhance the market protections afforded by that regulatory framework. Changes are appropriate only after identification of specific problems, a reasonable belief that the change will remedy the problem, and careful consideration of the possible effects of the change on other segments of the market.

The Commission's position on the bill you have asked us to review is the same as we took on a similar bill being considered by

Senator Leahy, Chairman of the Committee on Agriculture. In view of the steps that have been taken, legislative action is premature. Furthermore, the creation of a new governmental unit, especially as established in this bill, would raise serious questions about regulatory authority, impose duplicative layers of regulation, and associated unwarranted costs on the taxpayers and affected industries and could hinder, in fact, the type of coordination the bill seeks to achieve.

The major changes envisioned by the bill would introduce uncertainty which would be counterproductive right now. I would be happy to discuss further some of these issues in the bill in more detail.

Thank you.

[The complete prepared statement of Mrs. Gramm follows:]

The CHAIRMAN. Thank you, Chairman Gramm.

As I indicated in my opening statement, I am very concerned about the lack of action on the part of the regulators. When you look at the history of what's happened, on January 8, the Brady Commission made its report. The stock market crash had taken place in October, so it was a thoughtful report. It had many, what I thought, were excellent recommendations. Its principal finding was there was a single market as far as securities were concerned in this country, but they had divided regulatory jurisdiction. It wouldn't matter so much if we could have a divided regulatory jurisdiction with coordination and with a system for making decisions when decisions are necessary, but it's clear that we don't have that. And they recommended that we have that kind of a system put in place for margin requirements, for circuit breakers, for clearinghouses, and for information systems.

That was on January 8. On February 2 and 3, we asked each of the regulatory agencies to respond to those recommendations. We gave a deadline of March 4. Now we're told, take it easy, don't go too fast, don't rush into this thing, let's make sure we know what we're doing, we have to be very careful about it. All those things are true. We're not going to enact legislation today or tomorrow, but the year is moving on. We're almost 6 months past the October crash. We've done nothing so far.

We've had marvelous reports, very detailed reports. People were in fact teasing about how heavy the reports were. They were voluminous. So we have the information and it seems to me that it's time that we got some real action and some specific recommendations from our regulators.

WHITE HOUSE WORKING GROUP

I'd like to ask, starting with Mr. Ruder, who's been the most decisive I think in indicating that he would like to have some kind of action. Mr. Ruder, what assurance can you give us that the White House Working Group that each of you is participating in is not a pure and simple do-nothing and dilatory tactic, that you're going to come up with some real recommendations?

Mr. RUDER. I can give you my personal assurance that we are working very hard within the group and separately to find recommendations of the kind that I think the Nation is looking for, recommendations that will meet the problems of fear that our market will have a reoccurrence.

I would say to you preliminarily that your characterization that we are doing nothing is simply not correct. Our written statement indicated very clearly, Chairman Proxmire, that the Securities and Exchange Commission has been very active working with the self-regulatory organizations to try to make the systems work better, to urge those organizations to urge their members to increase their credit lines and their capital, and to do things that are very important for the operations of the markets.

The CHAIRMAN. But what I asked for, Mr. Ruder, was that you give us specific recommendations on whatever legislative action you thought Congress should take so that we could go about our business and act in a reasonably prompt way.

I asked that you do that by March 4. As I say, you've done a superb job in your study. You've come up with an excellent analysis of what happened and what the problem is, but we wanted legislative recommendations. Now the White House says let's not do it until May.

Mr. RUDER. I understand the problem that you have with that. You may remember that our testimony on February 3 did have some recommendations regarding the regulatory problems. We did indicate that we thought that the Securities and Exchange Commission should have the tie-breaking power. That was and does remain a Securities and Exchange Commission recommendation.

We think that is the best way to provide a system which really makes sense. We believe that the Securities and Exchange Commission has the expertise to deal with the intermarket questions, and, additionally, we are pledged to engage in cooperation with the Fed and the CFTC on reaching conclusions.

I may note for you that the process of coordination and decision-making simply cannot go on in an enormously fast way. We dealt first of all with the suggestion that increasing margins be the way to deal with some stock market problems—at least initially. That suggestion has been met with great opposition from the futures side, although they have moved some way toward increasing their margins, and we are now actively negotiating and discussing with the CFTC and particularly our own SRO's to see what steps can be taken to put coordinated circuit breakers into place. And I have had personal conversations with our SRO's urging that there be additional steps along the lines of placing circuit breakers into the market so that we can have the kind of coordination between the markets that is essential.

So I think that the concept or thought that there is delay in achieving necessary legislation is really kind of misplaced. We think that we can do it ourselves now through the kind of coordination we're having individually and in our working group.

The CHAIRMAN. Well, I think that's fine. What I wanted—and I want to ask Chairman Greenspan about this—and what I thought I made clear was that we wanted you to independently, without clearing it with—in fact, I think I specifically asked that—without clearing it with the administration, come up with your recommendations. We have to make a decision on that. We would also like the administration to make their decisions. But what we didn't want was something that: (a) would postpone it; and (b) would result in watered-down recommendations where we wouldn't know what your own personal feelings would be and it would be worked out in some kind of a compromise with the Secretary of the Treasury making the decision as to what we would be allowed to know about what the regulatory agencies, which are independent and which this committee has oversight responsibility for, at least all except Mrs. Gramm's agency—what your views were.

Chairman Greenspan, let me ask you this. In your testimony you note:

If margins are deemed important to control leveraged speculation, this implies a much different structure for the levels and consistency of margin requirements across markets than if the objective is simply protection over the market.

Now on February 2, you affirmed that margins are important to control leveraged speculation. Given this, shouldn't an independent authority govern them in the futures market?

Mr. GREENSPAN. I think we have to split the margin issue into two discussions. One is to be sure, as a minimum, that margins meet the prudential requirements of the particular organizations which they are trying to protect, and I think we have the capability to initiate action to solve that particular problem.

The basic issue that we have with respect to the second aspect of margins, which can be handled independently, at least in part, is the extent to which margin changes in both cash and in the futures markets as well as options significantly alter the volatility of the markets themselves. The data are ambiguous on this question and this is one of the issues which this group and others are discussing. We are discussing it internally. I doubt very much that you're going to get final conclusions now which are not watered-down versions, but hopefully with the best thinking that we can impose on this very complex question we should be able to establish margins which create comparable areas of safety for both the futures and the cash markets in an competitive environment. The second issue of just precisely how or whether we even should impose additional margins is at the moment undergoing a very large degree of analysis. Hopefully we will come up with a conclusion which we can present either as the Federal Reserve position or as a part of a group to this committee that we would feel is sufficiently supported by evidence and analysis that the committee can act upon.

The CHAIRMAN. Thank you very much. My time is up. Senator D'Amato.

Senator D'AMATO. Thank you, Mr. Chairman. Mr. Chairman, let me first say that I very much agree with Senator Dixon. Although it might make great newspaper headlines, attract great publicity, to call for various legislative proposals and enactment, indeed, I think that legislative action, particularly the kind that we are capable of, could be much more destabilizing and destructive of the very objectives that we talk about achieving. And that is tranquility in the marketplace, stability in the marketplace, and the kind of reform that brings about the things that the three Commissioners here have been testifying to. That is better coordination and it's taking the appropriate action, seeing if they can't, and then if they can't resolve differences, it may very well be necessary, as Chairman Ruder has seemed to indicate, to take specific legislative reforms, whether it's the self-regulators who fail to meet the mark or the test, whether it's the agencies themselves who fail to meet the mark or the test, by God, this business of saying that we've waited since October and because we had this great crash in October and this problem that there must be legislation, I would simply say that that is a conclusion that this Senator can't support. But after all, I was only one of two on the 94 to 2, and maybe you can get 94 others to go along with the rush for legislation. It seems we're more hell bent on changing things and to pat ourselves on the back than taking a look at what the ramifications are.

So I would reject that kind of philosophy. I would ask the Commissioners to let me take this time—I hate to say it in front of the

junior Senator from Texas—in four and a half pages, Commissioner, you have stated I think very, very cogently why the working group should be permitted an opportunity to finish its work rather than to be deluged with legislative proposals that it has to take time to comment on and to worry about what the reactions will be. Even if not adopted, there are various reactions to this in the marketplace, particularly when powerful Members of the Congress make the kinds of utterances that could be very, very disquieting.

Let me simply start with commending Commissioner Gramm for putting it so concisely in four and a half pages, and I've recommended to the Senator that he be more concise in his speechifying on the floor of the Senate. I want you to know he rejected my suggestion.

Mrs. GRAMM. Thank you. He doesn't often listen to mine, either. [Laughter.]

LEGISLATION COULD BE COUNTERPRODUCTIVE

Senator D'AMATO. Is it fair to say that you believe that legislative recommendations may not be necessary or action may not be necessary at this time and could even be counterproductive?

Mrs. GRAMM. I believe so. As far as the futures markets are concerned, there have been a lot of actions that have already been taken. There has been coordination. There has been action and we need to foster that process.

I do think we also need stability now. The markets need regulatory certainty as well and I believe bills to radically alter regulatory structure without any seeming gain is a real concern.

Senator D'AMATO. Chairman Ruder, it's been said that we've done nothing so far. Is that true? If it's not, what has been done? What actions have been undertaken, be it by the regulators and be it by the self-regulatory organizations. What, if anything, has been done?

Mr. RUDER. Well, I might just indicate to you that the self-regulatory organizations, under the urging of the Securities and Exchange Commission and the Commodity Futures Trading Commission, have been meeting and working on the solutions to regulatory problems.

On January 11, the heads of the SRO's met at the New York Stock Exchange to discuss methods of improving communications. On February 24, all of the exchanges, including the equity, options, and futures markets—

Senator D'AMATO. Let me interrupt you a second and say don't give me a litany of those things. What, if anything, has come about? Have there been margin changes? Have there been other kinds of changes that have been implemented?

Mr. RUDER. There have not been the kinds of circuit breaker or margin changes that have been widely expected as a result of the various reports.

There have been systems improvements and communications improvements which are vital to keep the markets from being clogged. And we thought that those things had to be attacked first.

Senator D'AMATO. Are they significant?

Mr. RUDER. Oh, absolutely.

Senator D'AMATO. So there have been significant changes?

Mr. RUDER. Yes, sir. We are increasing the automation. We are increasing communication. We are going to do away with the system breakdowns that we had in the high volume days in the week of the 19th. I regard that as very significant progress.

Senator D'AMATO. Thank you.

The CHAIRMAN. Senator Riegle.

Senator RIEGLE. Thank you, Mr. Chairman.

MORE CHANGES NEEDED

I'd like to ask a question to each of the three of you. Chairman Brady of the Commission has come in and said to us in very striking language that he feels that not enough has been done to make needed adjustments in one form or another between the markets and that he describes the situation as being like a loaded gun and that we are looking down the barrel of the gun and his suggestion from that phrase is that he thinks that we remain very vulnerable to another kind of mishap in the market because in his view not enough steps have been taken to deal with it.

Do you disagree with that, Mr. Greenspan?

Mr. GREENSPAN. Partially. First of all, let me say that I subscribe to what Chairman Gramm and Chairman Ruder are saying with respect to what has in fact been done. What has been done are those things which needed to be done as a direct result of the October crash.

A number of actions were taken. A number of changes in structure were made and, most importantly, the actions have been taken as quickly as is feasible to prevent system breakdowns, as Chairman Ruder said a moment ago. That's a very crucial issue to this whole particular problem.

I can assure you, Senator, that if any of us believed that there were one or two single issues which had to be resolved in order to prevent the type of events which happened in October, we would have moved very early on to try to see that that got implemented. I think we have to be aware of the fact that through all of these analyses, all of the various amounts of work that have been done in the studies as well the work by people directly involved in the regulatory agencies of government, all of this work has concluded that there are problems and needed changes, but I don't think that any of us believe that there is a specific thing which has to be changed immediately, and can be changed immediately, which will in fact prevent the type of event that occurred last October from reoccurring.

Senator RIEGLE. It sounds to me, though, that what you're saying in that very carefully phrased answer is that there are other things that need to be done but you're not quite sure what they are. Is that right?

Mr. GREENSPAN. That's correct, Senator. I think that we learned a great deal during that October period, but a lot of it is very complex and requires sorting out, and that's being done at a fairly rapid pace. I, myself, have spent a very considerable amount of time reading those reports that have been done, thinking about it, trying to think of what type of structural changes could significant-

ly improve the system, and I think we are making progress. All I can tell you is that, as a preliminary conclusion, what is in place currently is reasonably secure, but it clearly does need adjustments, in part because of what we identify as the tremendous increase in telecommunications, cross-border trading, the whole internationalization of the system, as well as the dramatic change in the complexities of the forms of trading that are going on. That requires some considerable thought, and I think we're making progress on addressing the problems that Chairman Proxmire has put forward.

Senator RIEGLE. Within the 5-minute time periods that we have for questions, I want to in the second round come back to that same issue with the other two witnesses, but I want to pose a different question to you, Mr. Ruder, and to you, Mrs. Gramm.

In the discussions that have been going on between the two of you and your two respective agencies, what points of contention or differences of opinion are there outstanding between the two of you as two different regulatory groups that you've been debating but have not been able yet to resolve?

Mr. RUDER. If I could speak initially to that, I think that the two points that we have talked about together have been margins and circuit breakers. I think that the disagreement on margins is intense, but I do not think the disagreement on circuit breakers is intense and I really am very pleased to say that I think we are moving—we have been moving more clearly toward the possible resolution of the circuit breaker question, both in our private meetings and in our meetings with this working group.

Mrs. GRAMM. I would agree with Chairman Ruder and I really do think that there has been a lot of attention focused on the differences, but indeed I think that there are a lot of issues that we do agree on. And as Chairman Greenspan has indicated, the major—

Senator RIEGLE. If I may say so, I'm not concerned about the areas that you agree on. I'm really concerned about the areas you don't agree on.

Mrs. GRAMM. Well, I agree with Chairman Ruder that with regard to the issue of margins—I would argue, as I argued earlier on, that I thought they were probably consistent even during the October break period and since then they have been increased. In the area of circuit breakers, I think we agree on some of the concerns that we have with circuit breaker mechanisms.

Senator RIEGLE. So you're coming together on the circuit breakers but the margin issue I take it is really still a major point of difference between you.

Mrs. GRAMM. I don't know that it's that major a difference. We have a difference of opinion there, but we are continuing to discuss that. Even on circuit breakers, I'm not sure that we ever really disagreed on the notion that circuit breakers ought to be coordinated.

Mr. RUDER. If I may just take 1 minute of your time, sir, one of the things that is probably not apparent to people who do not fully understand the structure of the regulation—I know you do, but perhaps others and even the public don't understand. We are regulators with self-regulatory organizations who really have the first level of decision making, and part of our responsibility is to deal

with those market people and ask them to cooperate in finding solutions. It's very important because they are the people who are sensitive to the way the markets work and one of the reasons for delay in the circuit breaker matter has been an effort to try to move the self-regulatory organizations—the options exchanges, the stock exchanges and the futures exchanges—so that they can come to an agreement which meets the needs of each of their markets.

Senator RIEGLE. Mr. Chairman, my time is up. I would just hope that before the hearing ends this morning, now that the margin issue seems to be the central point of—well, Mr. Ruder says it is and Mrs. Gramm says it isn't—if they're not saying the same thing on that, there's clearly a difference, but I would hope we could pursue that as the morning goes on.

The CHAIRMAN. Senator Bond.

Senator BOND. Thank you, Mr. Chairman.

Perhaps to clear up one thing, a question was raised by our good friend from Michigan about the dangers that we could have an October 19 all over again. While clearly all the steps have not been taken that should be taken in response to the market crash, hasn't there been a change in the way the world works since the 19th. Some of the elements such as dynamic hedging that contributed to the crash have been discredited. Some of the actions taken by individual institutions to protect themselves have significantly lessened the dangers? Would that be a fair statement? I would start off with Chairman Greenspan.

MARKET SIGNIFICANTLY LOWER

Mr. GREENSPAN. Yes, I think that's certainly correct, Senator. As I said in my earlier remarks before this committee in early February, First, the mere fact of the market being significantly lower clearly reduces the probability that an event similar to that which occurred last October can occur.

Second, I think that the major users and creators of a number of the products, such as portfolio insurance by pension funds, have had a significant revision in their view of how effective that type of activity is, and that has been scaled back by about two-thirds.

The volumes in a lot of the frenetic computer operations which tended to lead to the system breakdown have been very significantly reduced, and there's a great deal more caution.

But I think the most important thing is that when events like October happened, the people who are directly involved in the market structure themselves recognize where the problems were and try to change it, and I think it is they who have made the most major changes and reduced the probabilities of an event such as last October reoccurring.

Senator BOND. Do either of you care to add anything to that?

Mr. RUDER. I'm in general agreement with Chairman Greenspan, but I cannot offer to the committee at this point a statement that the markets are not subject to a major correction. I can't go that far.

Senator BOND. I was not seeking that. I wanted to make sure there was no misapprehension that we are creeping on October 16 or 17 or October 15 or 16 again right now. I wanted to correct any

impression that we might be looking at another October 19 next week.

Mr. RUDER. There are certainly no indications in that direction. I may say that the January 8 decline of 140 points on the Dow was of great concern in the industry and remains of great concern in terms of finding steps to dampen volatility.

Senator BOND. Is it not true that any steps that we ultimately take here are going to have to be taken in the other world markets, London and Tokyo, or we'll just see some of the trades moving overseas?

Mr. RUDER. At this time, sir, I do not believe those markets are well enough developed to have volume move overseas in great amounts. I think Chairman Greenspan is entirely correct that in looking at legislation and structural reform, we have to be aware of the markets, particularly in the 1990's, in which there will be a very significant change and the possibility of markets moving overseas.

Senator BOND. Chairman Gramm.

Mrs. GRAMM. I don't disagree with Chairman Greenspan. I would just like to focus attention on the fact that what happened during the October period was a significant change in investor attitudes. So there was a selloff and what we are focusing on now is that in a period of extreme price volatility when investor attitudes have changed and are communicated through the markets that the systems in place, particularly the payments system must function properly. Since you have large amounts of money running through the clearance and payments systems, those systems mustn't break down. That's the important issue. Margins and other jurisdictional issues I think are small compared to the issue of looking at that settlement system.

Senator BOND. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Sanford.

Senator SANFORD. Thank you very much.

I suppose that all of us are somewhat concerned that one of these days we'll suddenly get a message such as we got last October that the bottom has fallen out again. I notice in the paper today, the Wall Street Journal shows the tracking of the Dow Jones in 1929, 1930, and 1931 with the tracking of 1987, 1988, and 1989, and it's following it almost to the millimeter. I think we see a continuation of an unhealthy kind of, in my opinion, hostile takeovers going unrestrained. We see the spirit of speculation undaunted as ever.

I don't know whether the market will build back up to unreasonable levels or not, but I think what concerns me is perhaps—well, two things concern me. First of all, I think perhaps the regulators haven't really been responsive to this committee's request for information and plans of what ought to be done or more specifically recommendations. I think instead of coming with independent suggestions as requested by the chairman that all three more or less retreated to the umbrella of the White House and have come up with an Executive order, which may be all right.

But what if this happens and we've just been dragging our feet and waiting until we have a little more information or simply responding to the natural tendency of putting things off?

TESTIMONY OF
DR. WENDY L. GRAMM
CHAIRMAN
COMMODITY FUTURES TRADING COMMISSION

Before the

COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS
UNITED STATES SENATE
MARCH 31, 1988

Senator Proxmire and Members of the Committee:

Thank you for the opportunity of appearing before you. You requested that we provide you with any legislative recommendations the CFTC might have concerning the October 1987 market break. As stated by Acting Chairman Mineman at the February 3 hearing and reaffirmed in our letter to you of March 18, the Commission does not believe legislative changes are needed. Many issues are already being addressed through refinements and enhancements to the futures regulatory system as described in our March 18 letter. Other issues cut across markets and require coordination and cooperation among various exchanges, clearinghouses and regulatory organizations. Those coordination efforts have been ongoing ever since October 19. We have made headway in a number of areas and I am optimistic that we will continue to build upon that progress.

As you know, the President has recently established the Working Group on Financial Markets to identify appropriate recommendations and actions to enhance the integrity, efficiency, orderliness and competitiveness of our Nation's financial markets

and to maintain investor confidence. The President has identified a number of specific areas of interest which he has directed the Working Group to consider. The principals of the Group have met twice since last Wednesday and the senior staff of the agencies represented on the Group have had additional discussions among themselves. It is quite clear that the Working Group is taking its title and responsibilities seriously and is indeed working very hard on these important issues. I think it important for attention to be focused on the important issues concerning the smooth functioning of the clearing, settlement and payment systems rather than less significant bureaucratic issues.

Thus, the one recommendation I have for the Committee is to give the Working Group and the various exchange and clearinghouse coordination efforts a chance to work. Congressional interest has given these cooperative efforts a healthy impetus. But to initiate legislation at this point would force exchanges and regulators to turn their attention away from the ongoing coordination efforts and focus instead on the legislative process, thereby causing delay in addressing important issues until the effect of the legislation is finally determined. This is particularly so with proposals that call for the creation of new layers of regulation and new lines of regulatory authority.

The Congress has created an expert agency to oversee the capital formation process in the United States. The Congress has

created another expert agency to regulate the price risk transfer function of the futures markets. The securities laws in the early 1930's and the law first establishing futures regulation in the 1920's are examples of functional regulation upon which the Congress and the Administration have agreed for over half a century. No evidence, including information from the October market break period, has been presented to justify a departure from this regulatory approach. Mr. Chairman, Congress has given this country a sound and sensible regulatory framework for its markets based on the concept of regulation by function. That sound framework enabled the various marketplaces and participants to withstand the most significant reversal of investor attitudes in history. As expert regulators, each of us have ideas to refine and enhance the market protections afforded by that regulatory framework. Changes are appropriate only after identification of specific problems, a reasonable belief that the change will remedy the problem, and careful consideration of the possible effects of the change on other segments of the market.

The mere fact of a reversal of investor attitudes is not evidence justifying major legislative changes. Injecting the element of legislative uncertainty may not only delay important discussion of crucial issues, it also may cause unease in the investing public as it would appear to question for the first time the soundness of the entire regulatory structure.

The Commission's position on the bill you have asked us to review is the same as we took on a similar bill being considered by Senator Leahy, Chairman of the Committee on Agriculture. In view of the steps that have been taken, legislative action is premature. Furthermore, the creation of a new governmental unit would impose a duplicative layer of regulation and associated unwarranted costs on the taxpayers and the affected industries, and could hinder, in fact, the type of coordination the bill seeks to achieve.

The regulators and the exchanges are sincerely committed to enhancing the soundness and safety of the system without endangering the efficiency and competitiveness of these markets. Progress is being made and we ask for the opportunity to finish the job.

Let me ask Mrs. Gramm first, since I haven't had the pleasure of asking her a question prior to this, and then the rest of you—to comment on the concern that I think I have and maybe some other members of the committee that the working group is not under any kind of a deadline. The President's letter simply asked for an initial report in 60 days.

DEADLINE FOR REPORT TO PRESIDENT

Now do you view this order as a final date? Do you expect the work to be completed by then or do you anticipate that 60 days from now we will have a report that says we've got to get to work?

Mrs. GRAMM. In 60 days we are to report to the President and we may take up other issues even after that, but I want you to know that all of us here feel quite a bit of pressure to address the issues and continue to coordinate and come up with some recommendations and answers before that.

I might point out as well that while people say there hasn't been action, there has been action. I would also point out that there have been many reports but not all the recommendations are the same. So we need to consider those as well.

Senator SANFORD. Well, I understand the complexity of it, of course. Do you want to comment just a minute and then I'd like to ask Mr. Ruder to comment on his perception of the dates for getting something firmly in place. What have your self-regulators done so far to confront this question?

Mrs. GRAMM. Well, we have explained this in quite a bit of detail in our letter of March 18, but let me summarize very briefly.

First of all, the exchanges, in response to our reviews and some of our recommendations as well, have taken action to improve the financial safeguards of the system. There is a sharing of what's called pay and collect information among the futures clearing organizations so they may have better information about the flow of the money. That would improve and enhance the efficiency of the payments system and to prevent potential gridlocks. I believe—maybe it's already been finished—the futures clearing organizations will have that system in place in the near future. It will include the option premium data and there are discussions to share data to the extent possible—with respect to securities data. Margins have increased. The exchanges have made a number of changes themselves to enhance the financial integrity of their clearing members and their organizations during a period of extreme price volatility. For example, they have changed capital requirements. They now require that if a subsidiary company defaults—and none did during the October break period I should point out—but if one should default, not only the subsidiary but the parent company would be liable for the debts of that subsidiary. The change would further increase the amount of money to be collected from other clearing members in case of a default of one member.

Those are the types of actions being taken. In addition, some futures exchanges have put in circuit breaker mechanisms. As Dave and I intimated, we're not totally comfortable that the circuit breaker mechanisms are coordinated yet, but it is a first step and

the exchanges continue to discuss further improvements. I believe that lines of communication have been cleared up and enhanced. So there has been a lot of activity already done.

Senator SANFORD. Well, thank you so very much. My time has expired and Mr. Ruder escapes for that reason.

Mr. RUDER. Thank you, sir.

The CHAIRMAN. Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Yesterday I agreed to become a cosponsor with you on your measure because I think it's important that we stay on top of this and pursue it and just not let things drift away.

At the same time, I think we should acknowledge that a lot has taken place, as Mrs. Gramm has said, particularly by the Chicago Board of Trade and the Mercantile Exchange, with the circuit breakers and better information flow and clearing and settlement systems and margin requirements increased. Likewise, the New York Exchange.

PARTICIPATION BY INDIVIDUAL INVESTORS

There are two concerns I have as we go through this and I'd like to ask Mr. Ruder if this is true. It's been my understanding that the participation in the market by individual investors has dramatically decreased since October. Is that true? And of course there may be better bond prices or concerns about lower stock prices. The first question is, has the participation by individual investors greatly decreased?

Mr. RUDER. Yes, sir, that's my understanding, that there has been a significant decrease in the individual investor participation in the market.

Senator CHAFEE. Have you got a reason for that? People were burned by October or loss of confidence or what?

Mr. RUDER. I think there's still a considerable loss of investor confidence with regard to the stability of the market and I here refer primarily to the problems of possible excess volatility.

Senator CHAFEE. Does that concern you?

Mr. RUDER. Absolutely.

Senator CHAFEE. The second question—and Mr. Greenspan answered this when he took it up before when he was up here before—and that is, we all have a concern—certainly I do—about the international competition, the foreign markets, whether if we tighten up too much margin requirements, for example, that they will just go abroad.

On the other hand, it seems to me—I believe you rather pooh-poohed that because the size of the markets abroad; are so limited. They're not dumbbells over there and maybe I'm quoting you out of context. They're not dumbbells and presumably those markets can increase dramatically. What do you say to that, Mr. Greenspan? Do you have concerns about that?

Mr. GREENSPAN. Yes, I do, Senator. I think that certainly it is the case at the moment that the size of the markets and their capability of handling spillover from the U.S. exchanges is quite limited. But it doesn't require very much to construct an exchange that can evolve, as indeed we've seen different types of markets evolve

as a result of regulations. We created the Eurodollar market, for example, largely because in this country we regulated the flows of international exchange. And one can scarcely argue that that is a small market these days.

I think that it would take a while, if we put burdensome regulations on, to move the markets abroad; and remember, if the markets move abroad, they still affect us here. In other words, it's not the issue of taking a problem and exporting it. It still has the impact here in much the same manner. So we do not, in that sense, insulate ourselves as a consequence.

Senator CHAFFEE. Mrs. Gramm, on the commodities markets, is there competition there possibly abroad?

Mrs. GRAMM. Absolutely. I would submit for the record what happened on October 20. The exchanges put price limits on and, as you know, the bond prices were increasing, and met the limit—locked the limit up, in other words. It hit the limit on the upside and trading stopped on the exchanges here and Treasury bond futures volume in London on the London International Financial Futures Exchange increased eightfold on that day.

[The following was subsequently submitted for the record:]



COMMODITY FUTURES TRADING COMMISSION

2033 K Street, N.W., Washington, D.C. 20581
(202) 254-8970

Wendy L. Gramm
Chairman

April 4, 1988

The Honorable William Proxmire
Chairman
Committee on Banking, Housing and
Urban Affairs
U. S. Senate
534 Dirksen Senate Office Building
Washington, D. C. 20510-6075

Dear Chairman Proxmire:

During last week's hearing, Senator Chafee asked about competition from foreign financial markets in the event trading on U. S. markets should become subject to burdensome regulatory requirements. I noted a specific example of the potential for futures trading to shift to foreign markets when U. S. futures markets are not available. On October 20, 1987, trading in U. S. Treasury Bond futures on the Chicago Board of Trade was halted when prices rose to the level of the exchange's price change limit (maximum daily price change limits are a common feature of U. S. futures exchange rules).

The London International Financial Futures Exchange (LIFFE) also trades a futures contract in U. S. Treasury Bond futures. On that day, when the CBT stopped trading, volume in U. S. Treasury Bond futures on the LIFFE increased by eightfold. As I offered at the hearing, I am enclosing for the hearing record a chart illustrating this fact.

Please let me know if you have any further questions in this area.

Sincerely,

Wendy L. Gramm
Wendy L. Gramm
Chairman

cc: The Honorable John Chafee
U. S. Senate

Senator CHAFEE. Now I suppose if these circuit breakers—that would be a factor that might drive the sales abroad, wouldn't it?

Mrs. GRAMM. Any regulatory change, including circuit breakers, could increase the cost of doing business and you must be sensitive to the fact that in imposing a cost of doing business you could, over time, send that business overseas.

Senator CHAFEE. Well, those are concerns I have. I notice my time is up. Mr. Chairman, I agree with you that it behooves us to follow this closely and not just forget the thing, and I appreciate the testimony from the three witnesses today and certainly I intend to stay abreast of it. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Gramm.

Senator GRAMM. Thank you, Mr. Chairman.

CIRCUIT BREAKERS

Mr. Chairman, it seems to me—it may be that I'm looking at it and thinking that you people agree with me and maybe you agree with other people—but as I listen to the discussion about circuit breakers now that we have all become aware of all these mechanisms since October, as I listen to what is being said by people inside the industry or regulating it, you're not viewing circuit breakers as being some kind of magic. You're not viewing them as a way of saying, well, if we wait until tomorrow, tomorrow is another day and, therefore, maybe prices won't go down if we don't let them go down today.

You're viewing circuit breakers as a mechanism that allows the market to disseminate a little more information, to put its liquidity in order, but not as a mechanism to stop the market. Is that right?

Mrs. GRAMM. That's right.

Mr. RUDER. To whom are you addressing that?

Senator GRAMM. To everybody.

Mrs. GRAMM. To prevent system overload is the problem, to prevent gridlock.

Senator GRAMM. So the problem you're really trying to deal with here is not, in the words of the view that is often spoken loudly around here, override the vagaries of the marketplace? You're just trying to be sure that when market forces move that they are not compounded by mechanisms within the system that create uncertainties about the ability of markets to clear or concerns about liquidity or other factors that tend to exacerbate natural market mechanisms and make them move further than they would. Is that right?

Mr. GREENSPAN. I think that's correct, Senator. The purpose of circuit breakers is to prevent markets from creating their own break in an ad hoc basis. In the October crash, the demand for execution, both in the futures markets and in the stock markets combined, exceeded the capacity of the system, and we got a circuit breaker. The question basically is, is that the way we want it to happen? And the answer is: No, we do not because that, as you pointed out, creates increasing uncertainties, and the uncertainties themselves tend to drive prices still lower.

As I say in my testimony, my impression basically is that a substantial part of the decline in that October crash resulted from sys-

temic problems in the structure of demand and supply, and one of the things that, as Chairman Ruder pointed out earlier, we are endeavoring to enhance is the capacity of the system to take on surges in orders. But where it cannot, it is far better to have a programmed pause or a programmed break. Circuit breakers are not good. They do not work effectively in markets. They are not something which we would otherwise like to do. They are, however, something that we prefer to an arbitrary circuit break which occurs without control.

Senator GRAMM. If I could come back to that, Mr. Chairman, I think the point that Dr. Gramm made about what happened in the bond market is a very revealing point because here we were all looking at stocks while at the same time bond prices were skyrocketing. There were foreign markets developed for bonds and we saw an eightfold increase in that market when that circuit breaker went into effect.

But I want to come back to the purely technical overloading of the market due to computer trading. I get the idea in listening to some people that there are people who believe that we can prevent prices from going down if we could ban computer trading. In my more flippant moments that I'm obviously not going to engage in here today, I have suggested that maybe we might want to ban the telephone, that if information is the problem, we could eliminate the calculator and the ballpoint pen. I guess what I'm saying is that the use of the computer is clearly something that is going to be present in markets, and unless we can learn to deal with the mammoth movement of information and execution orders and develop our system to make that workable, then ultimately somebody else is going to do that somewhere else in the world and those markets are going to move there. I know I've run out of time but I'd like to ask each of the three to sort of respond to that.

Mr. GREENSPAN. Senator, let's remember where all of this type of derivative product trading comes from. It comes essentially from the fact that pension funds, our pension funds, have determined that they have great advantages in their ability to manage those funds by having access to the various types of computer-related products. It is their demand, not the notions of people on the Chicago Mercantile Exchange or others, which created this market.

The day they decide that none of that is of any use is the day the whole system disappears. But so long as they continue to believe, as they do today, that this is a very important advantage in managing our pension funds, which are so important to our economy, then we will continue to have this form of trading. And if the markets are not supplied in the United States, they will be supplied elsewhere.

Mr. RUDER. I'd just express my agreement with what Mr. Greenspan has said. In fact, I think you are hearing strong agreement between all of us here that the problem is to deal with these markets as a whole. The problem is not to attempt to keep the markets from going up or down. The problem is to avoid the kind of volatility in the markets which will cause panic and uncertainty, something that we don't want.

So our job is to balance the question of how much cost we should put on a market which we would like to operate as well as it can in order to avoid having the kind of volatility we are worried about.

And I do agree that, although there is not currently a derivative products market overseas, that kind of market will develop in which an index will be traded probably on some combination of New York Stock Exchange stocks. Whether it will be in Japan or London I'm not sure, but I am sure that that will take place.

Mrs. GRAMM. I have nothing to add. I thought Chairman Greenspan did an excellent job with that answer.

The CHAIRMAN. I want to ask each of you—well, I want to ask Chairman Greenspan and Chairman Ruder. I think Chairman Gramm is clear on this. I want to ask you two gentlemen again about the fact that when you came up and testified on February 3 on the Brady report I asked for legislative recommendations if you had any, and I said to you, Chairman Greenspan:

Since all three agencies are independent regulatory agencies, we want to receive your recommendations directly without being altered by the executive branch. Would you comply with that request?

Chairman Greenspan, you said:

Yes, certainly, Mr. Chairman. We would, of course, want to see and examine in detail the forthcoming SEC evaluation which is rather elaborate and could conceivably give us insight about that which we already have, but we will comply by March 4.

You've slipped that date. This is now more than 3 weeks since then and now the indication is that we're not going to get anything until May, if we get anything then.

Then with respect to you, Mr. Ruder, I said:

I ask that you make this report without consultation with the executive branch. Would you do that?

You responded:

We will make that report to you, sir, and it would not be normal for us to consult with the executive branch before providing legislative recommendations to you.

And then the reason you're off the hook, Chairman Gramm, is because Chairman Hineman, your predecessor, replied by saying, "We have no legislative recommendations. We don't think there should be legislation." Which is fine. If all three of you said that, then we'd understand. But that's not what we got from Mr. Ruder and Mr. Greenspan.

And you say the same thing, you're not recommending legislation.

Mrs. GRAMM. Yes.

The CHAIRMAN. And I have no objection to that at all. It's a free country and that's the exercise of your free speech and your decision.

But you see the dilemma that that places the committee under. We asked for legislative recommendations without consulting with the administration and, in spite of that, nevertheless, rather than provide the SEC's independent assessment of legislative needs to the committee, you're now taking part in the President's Working Group on Financial Markets which won't report to us until May, if then—it won't have a report ready until May. It might report in

June or July. How do you reconcile that with your commitment to the committee, Mr. Ruder?

REASONS FOR DELAY OF RECOMMENDATIONS

Mr. RUDER. Chairman Proxmire, as you know, I firmly believe that the Securities and Exchange Commission is an independent regulatory agency. That means that it can operate independently of the White House and independently of Congress, subject to oversight. And as you know, I did indicate in my testimony that we would provide legislation to you. I had a phone call from the White House asking about the formation of this working group. I indicated that I thought it was very important that we have cooperation between the three agencies and I thought that perhaps a more formalized means of getting our comments together and pushing cooperation would be very beneficial to the process.

The CHAIRMAN. And we said that at the time on February 3. My first point was that the three ought to get together. But I did not want you to get together at the direction of the White House, not that we wouldn't want their opinion, but we wouldn't want it filtered through them or for them to come up with a report.

Mr. RUDER. I understand. I found myself in a very difficult position between the White House and Congress and you may remember—you may not know this, but it was at my insistence that Senator Baker call you to inform you of the formation of this working group and I said that I have an obligation to the Senate and I want to have you clear it with them. Subsequently, I spoke to you individually, and it was my understanding that the system that we had worked out was satisfactory to you. Indeed, I wrote to you on March 17 confirming our telephone conversations of March 16, indicating that I thought it would be premature at the present time to specify particular legislative initiatives.

I did promise that I would include in my testimony today those legislative initiatives that I thought might be useful without specifying them in detail, and I have done so. There is a section in my testimony for today which specifies legislation.

The CHAIRMAN. It's not definitive. It's not very specific. As you say, it's very general.

Mr. RUDER. That's right.

The CHAIRMAN. Chairman Greenspan.

Mr. GREENSPAN. Well, I can almost repeat exactly what Chairman Ruder has said with respect to the sequence of events. Obviously when the notion of an Executive order surfaced I indicated to the White House that I had the same problem that Chairman Ruder did and as you know, we had that same conversation with a follow-up letter from me with respect to that issue.

I must say to you, Senator, that had the Executive order not been put in place, I would have recommended that there be some organization of the three of us or other groupings which would in fact do precisely what we are doing at this moment because the one thing that struck me about this whole episode is the necessity to differentiate the causes of the decline that occurred in October between the economic factors, the broad fundamental forces which

drive stock market values, and those structural problems with respect to the market as such.

There's not much we can do in this committee on the economic problems, and if there is another major problem in the stock market, it almost surely is going to result from economic, not from the systemic factors which we're looking at now.

Had I believed that, I would have recommended many more forceful things be done very quickly. But having reviewed the structure of the market and what has happened, while I do think there are changes required, I am not of the opinion that they are of such immediate moment that they need be addressed very quickly but rather, in a very deliberative manner.

This is not to say that I think that these markets out there are not at risk. They are always at risk. But I do believe that the risks are economic and we should view them from that side, which we discuss in a different venue. When we're looking at strictly the risks and the problems associated with markets from a set of structural problems, I think that we have to be very deliberative to make certain that we are addressing the real problems. Therefore, the only thing that I think is different at the moment is whether or not there is a voluntary or legislative or an Executive order group doing precisely what we are doing, which I think is the right thing.

The CHAIRMAN. I'm going to have to interrupt for the moment because we're going to take about 2 minutes to go off the pending business, if you will permit us. We have a quorum. That's not a common occurrence but it's because we have such stars testifying before us. We have a quorum. We would like to act on pending nominations. It will just take us a minute and, again, I apologize.

The committee has scheduled a hearing on the regulators' recommendations dealing with the stock market crash of October 19 and so forth. If at any point during that hearing there is a quorum present, it is the intent of the chairman to suspend temporarily in order to vote on the following nominations currently pending before the committee: David L. Chatfield of Alaska to be a member of the National Credit Union Administration Board; Kenneth J. Beirne of Virginia, to be Assistant Secretary for Policy Development and Research, Department of Housing and Urban Development; and Jesse D. Winzenried of Wyoming, to be a Director of the Securities Investor Protection Corporation.

If there's not objection, we will consider these nominations en bloc. Any discussion of the nominations?

Senator GRAMM. I move their approval.

The CHAIRMAN. The motion has been heard to approve the nominations. All in favor signify by saying "Aye."

[A chorus of ayes.]

The CHAIRMAN. Opposed, "No".

[No response.]

The CHAIRMAN. The nominations will be unanimously approved. Now my time is up.

Senator GARN. Mr. Chairman, could I just make a brief comment of why so many of us have not been here to hear such a distinguished panel. Those of us who just walked in have been negotiating all morning with the House on the trade bill, our sections of

the trade bill. The chairman was there with us earlier but came back to chair the hearing. The House Members are waiting for us to return. I speak for all of us. You are a distinguished panel. We are sorry we couldn't be here to hear your testimony but we've got to go back and fight with the House.

Senator HEINZ. Mr. Chairman, if I might just add to what Senator Garn said, I think this morning was very constructive. We are sorry we couldn't be here with the three distinguished witnesses, but I think the Senate and the House agreed to very significant milestone at this point in the conference on the agreement on sanctions with respect to Toshiba. What's significant to me about the agreement that we reached with the Foreign Relations Committee is that we have gotten strong legislation and, most importantly, the House agreed to actually expand the sanctions against the Toshiba Corp. from 1 to 3 years, expanded the procurement ban just from the Department of Defense to the U.S. Government with some appropriate and narrow exemptions, and I think because of that we have maintained the principle of corporate responsibility by holding the corporate parent accountable for either being willfully blind or negligent or grossly unwilling to police its subsidiaries. That is a most important principle that has been not just retained but strengthened in this legislation.

Senator GARN. Mr. Chairman, if I could just add—I didn't intend to bring up the subject, but there will be people who will wonder I suppose that the original amendment that I offered in the Senate—the changes that were made were that all of the sanctions on the knowing violator have not been changed from the original Garn amendment in the Senate on retroactive on the parent Toshiba Co. and in prospective sanctions the parent company will have sanctions imposed on all U.S. Government contracting for a period of 3 years. So although a full range of sanctions will not be applied retroactively to a parent company or prospectively, U.S. Government contracting will be prohibited and I think that it was absolutely necessary to send a signal of that kind to the business people of the world that they will not trade with the Soviet Union, they will not damage the security of this country, and get away with it. And I'm sorry the administration does not agree with that impression but they're going to have to swallow it or veto it.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. I'm going to have to leave myself. I'm supposed to chair that conference, so I'm going to ask Senator Riegle to proceed with the hearing.

Senator RIEGLE. Thank you, Mr. Chairman. You were the last one to question so I think the rotation goes back on that side. Do either of my colleagues here have questions?

Senator GRAMM. Well, I'm going back to the conference, so you're on your own.

Senator BOND. Thank you, Mr. Chairman.

I was going to comment before our distinguished chairman had to leave that I, too, have agreed to support his Intermarket Coordination Act, but I had one point that I wanted to raise with our distinguished panelists.

It seems to me that the Secretary of the Treasury would be an important member of that coordinating council and perhaps could

make it easier to coordinate among equals if he were the most equal and had the powers of the chairmanship.

I would ask first if any of you would have problems with that kind of coordination system in which the Secretary of the Treasury or his designee were added to the council?

ADDING SECRETARY OF THE TREASURY TO WORKING GROUP

Mr. RUDER. I have no problems with adding the Secretary of the Treasury to a working group or a discussion group. I have absolutely strong views about having a group with decisionmaking power in which the group is able to say that the agencies must pursue whatever that group says, and, particularly if the Secretary of the Treasury were added to a group of that kind, I think that would be a change in the system of regulation in the United States which clearly ought not to be done in an ad hoc basis of that kind.

If Congress wishes to reorganize the regulatory system over the exchanges and the monetary system, it certainly ought not to do so by investing a coordinating group with some sort of power to direct us to do things. The system is much too delicate to permit that kind of structure.

Mrs. GRAMM. If I may, it's more than a coordinating group. It is a superagency. I would just point out that I vehemently oppose that notion of creating a superagency, and I would point out just as a practical matter that if you had four voting members, at least two members could probably talk to each other. The way it's structured now—though even with four members I think it would still be a disaster of a bill—but the way it's structured now, if Chairman Ruder and I were to agree on something that ought to be done in our individual markets and then proceeded to undertake some rulemaking on the basis of that CFTC doing rulemaking on the futures side and the SEC doing rulemaking on the securities side, that it is not at all clear that would be legal under the new structure. That is, I don't believe that we could independently coordinate among ourselves if it could lead to rulemaking decisions, which is why independent agencies have five members as opposed to three.

Senator BOND. I think we must be reading off different bills, but let me ask Chairman Greenspan for his comments.

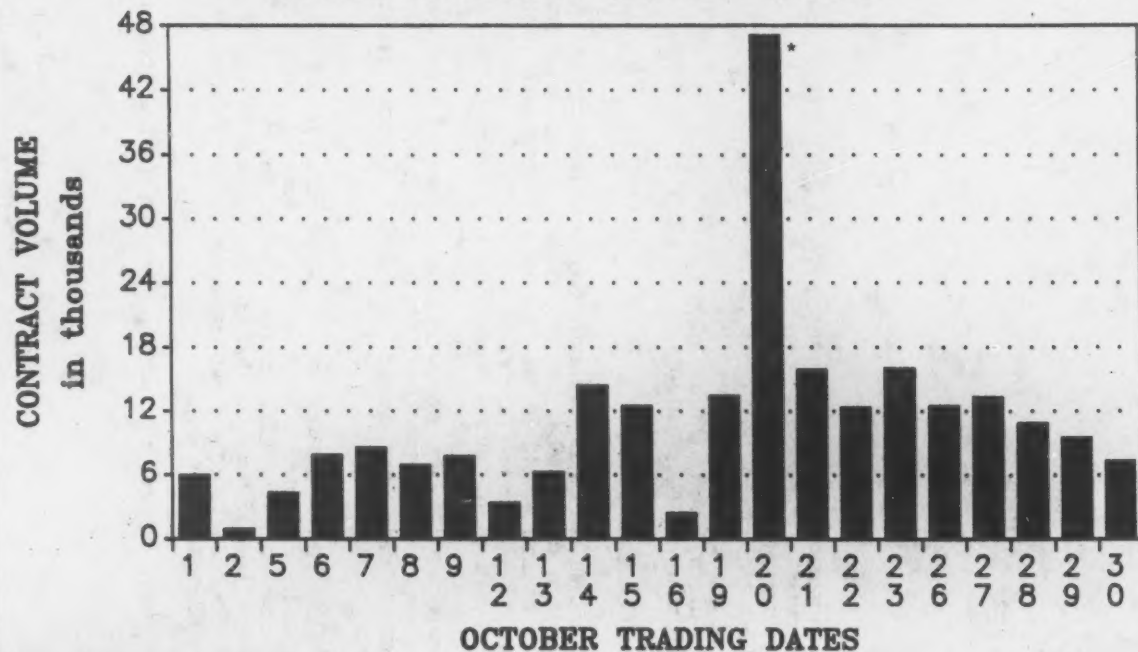
Mr. GREENSPAN. I think that there is some ambiguity in the bill as it's written now which would allow, for example—and this is hopefully a highly hypothetical example—this three-chairmen committee to vote two to one for, say, raising stock market margins, which is the bailiwick of the Federal Reserve, and I would be against that, let us assume, and so would every other member of the Federal Reserve Board. Now that raises a very interesting legal question as to whether or not the committee overrides the Federal Reserve Board on an issue which the Congress previously had insisted the Federal Reserve have control over.

And the reason that you run into this problem, as I mentioned in my prepared testimony, is that you have got essentially conflicting priorities in the system, and you either have to restructure the whole decision-making regulatory mechanism or remove the type of ambiguity which I just alluded to.

TREASURY BOND FUTURES VOLUME

LONDON INT'L FINANCIAL FUTURES EXCHANGE

OCTOBER 1, 1987 TO OCTOBER 30, 1987



* DAY SESSION ON CHICAGO BOARD OF TRADE
LOCKED THE LIMIT UP
BASED ON DATA PROVIDED BY CBOT AND LIFFE

Senator BOND. If I may say, I don't read anything here as giving this council the power to override the responsibilities of any single agency. I believe that Mr. Brady pointed out and I believe that others have stated that there is a tremendous need for coordination in planning, bringing the group together to plan, not taking the powers away.

I would agree with you, if I thought this bill were going to give a majority vote in that committee to override the regulatory decisions of any one of your agencies, then I would not be for it. But we are going to have to have a mechanism where your agencies come together and develop a plan which can be effective in case another October 19 starts to happen, before the thing spins out of control. We're going to have to have some one voice who can go to the other markets in the world and say, "We have taken steps. We want you to take steps. We are here to negotiate with you and develop a harmony in international market regulations."

This is not, in my view, in any way supplanting the powers or the responsibilities of any agency, but I see it as a necessity and I don't think that any one of you sitting at that table is going to be in nearly as good a position to head that coordinating council as the Secretary of the Treasury would be. If one of you wants to volunteer and say that you would be better—Mr. Ruder mentioned the SEC should be in the lead—I'd be happy to hear you say why you say you'd be better than the Secretary of the Treasury.

Mr. RUDER. Well, first of all, I would repeat again, I think it's wrong to establish a group which has decision making power over these agencies.

Senator BOND. I don't think we said that.

Mr. RUDER. I will read it to you. It says:

The committee shall have the power to enter into contracts to execute instruments . . . and to do any and all acts as may be necessary or incidental in the conduct of its business. . .

I read this legislation as drafted as giving great power——

Senator BOND. I think the contracts you can execute are the contracts to buy furniture.

Mr. RUDER. I do think that it would be wrong to rush into the establishment of such a council with any decision making power in a circumstance in which we are still in the negotiating situation and attempting to work out things in a clear and coordinated manner. I have made a legislative suggestion for what really is a very limited amount of authority going to the Securities and Exchange Commission to deal with the very few contracts that are involved with the derivative indexes, but not to have power over the Fed or over the major part of the CFTC's work.

Mrs. GRAMM. Senator Bond, I do think that it was worthwhile maybe getting other opinions, but it is the opinion of our lawyers and when I read it as well that there is rulemaking action here. For example, this committee must vote and operate in accordance with the other acts, the Sunshine Act, the Administrative Procedures Act, et cetera. I do believe that if you look at this carefully, and maybe we should refer it to legal counsel, but I believe that they would agree that there is a real confusion here about those particular authorities.

Senator BOND. Thank you, Mr. Chairman.

Senator RIEGLE. Just to follow through on this, I agree with the witnesses. I think that if we would include the Secretary of the Treasury, that we cross a key dividing line here. You are independent agencies, all three of you, designed that way, should remain that way. We've got all kinds of mechanisms in place to maintain the insulation and I think to—while it's tempting from a functional point of view to think about bringing in the Secretary of the Treasury, I think it really brings with it other problems that are really quite profound. So I would disagree with that idea.

Chairman Greenspan, I'm struck by what you said, and that is that I've been uneasy about thinking exactly how this mechanism would work myself in terms of decision making and votes and on one level I thought if there were a disagreement between the SEC and the CFTC you're the third vote on the panel and presumably you become the tie-breaking vote. I don't know how appetizing that sounds to you as an assignment—

Mr. GREENSPAN. Not very.

Senator RIEGLE. But you pose a different situation and that is what happens if the CFTC and the SEC are in agreement and you're the odd man out and it has to do with a function—that is, margin-setting—where that cross-connects to certain established responsibilities of the Federal Reserve Board that you presently have, and so you have an inherent potential for a conflict there. And that concerns me.

That to me is a real problem and I don't think that's been illuminated fully yet and discussed, but I'd like you to elaborate a little bit more on that if you would right now.

Mr. GREENSPAN. Section V of the bill has a phrase which says "such bodies" referring to the commissions "are directed to implement the actions so determined by the committee. If the committee determines that these bodies lack the necessary legal authority to implement the decisions of the committee, the committee shall report that determination to the Congress together with its legislative recommendations designed to accomplish the purpose of this act."

Now as I read that, and I'm not sure that it is meant essentially to mean what it says, it creates, in effect, an agency which overrides the commissions and, in so doing, it invalidates majority votes on the parts of the commissions to do "x" if in fact the superagency decides to do "non-x". While certainly one can construct a system of regulation which has the three of us at the top of it, the logical implication is to then fully restructure everything under that committee.

The alternative, which is what we're doing now, which I think is really quite effective is a voluntary agreement or a voluntary set of discussions with no mandatory requirements. It really is an issue of the Congress or the President or somebody else directing us to find agreements amongst ourselves and we take that request seriously, whether it comes from the Congress or from the President or a combination of both, and I think we shall.

But the alternative strikes me as an extraordinary alteration of the regulatory structure which raises vast numbers of potential

problems that I haven't even given 2 seconds thought to; but I am certain that more than 2 seconds is required.

Mrs. GRAMM. Senator Riegle, you can't give authority to a new agency without taking away that authority from whichever agency already has it, unless you're going to have just blurred lines of jurisdiction. That is the concern. And what we would have here as a result of this new bill is an agency made up of three individuals with the expertise of their agencies in three different places but each being able to make up one-half of a majority to make a decision about an agency over which they do not have the expertise.

I might add, though, just parenthetically, that with increased communication and coordination, we all have gotten much more expertise in the other agencies' business. But you're fundamentally changing the structure. If you look at an independent regulatory agency like the SEC or the CFTC or the Board of Governors, each Commissioner is an expert on that particular agency's business.

Senator RIEGLE. Let me just ask one yes or no question and then yield to Senator Graham. Were you consulted on this legislative package? Were you, Chairman Ruder?

Mr. RUDER. No, sir.

Mrs. GRAMM. No.

Senator RIEGLE. So your chance to react to it in terms of your support, reservations, whatever, really is occurring today in this setting?

Mr. GREENSPAN. Yes.

Senator RIEGLE. Thank you.

Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman.

I'd like to pursue the line of questions that you and Senator Bond have a little further and then ask a question on a different subject.

As close to a yes or no as you feel comfortable with to this first question, in our previous hearings on the autopsy of October 19, many people have felt that increased global cooperation and coordination was going to be a significant factor in ameliorating the circumstances that might lead to a repetition.

INTERNATIONAL COOPERATION

What weight do you put on the international dimensions of market cooperation?

Mr. GREENSPAN. I would put some, but I would not want to over-emphasize—

Senator GRAHAM. On a scale of 0 to 10?

Mr. GREENSPAN. Today I would put three; 5 years from now I would put eight.

Senator GRAHAM. Mr. Ruder.

Mr. RUDER. I would agree with that assessment, but I would add that I do not think that the foreign markets are going to solve our problems. I think they may indeed exacerbate them.

Senator GRAHAM. Mrs. Gramm.

Mrs. GRAMM. I think the international cooperation is important.

Senator GRAHAM. On a scale of zero to 10 today and 5 years from now, what numbers would you put on it?

Mrs. GRAMM. The CFTC is looking to the future and even before the October break I would have put it more on the 5-to-8 scale, regardless of the October period.

Mr. RUDER. The question does not deal with whether we're wanting to cooperate. That's a 10 for me. But the question was the importance.

Senator GRAHAM. The question was the importance. Is this a relatively trivial matter or is it a 10?

Mrs. GRAMM. It is important.

Mr. RUDER. You do have to understand that the equity markets are not as developed internationally as the futures markets are or the monetary markets are. So my answer in that sense may differ significantly.

Senator GRAHAM. Would you care to put a number today and 5 years from now?

Mr. RUDER. Talking equities, if we're talking about the importance of the international equity markets to the United States right now, I'd say it's a three, but in 5 years I think an eight; and that's a more than doubling of importance in 5 years.

Mr. GREENSPAN. I was referring to the equity markets.

Senator GRAHAM. No. 2, with that assessment of today and 5 years from now in importance, do you believe that the United States with its current organizational structure—that is, the specific independent functionally based regulatory agencies—can effectively participate in efforts at enhanced international cooperation and coordination?

Mr. GREENSPAN. Yes.

Senator GRAHAM. Mr. Ruder.

Mr. RUDER. Yes.

Mrs. GRAMM. Yes.

Senator GRAHAM. Mr. Chairman, it might be interesting in light of this legislation to look at our previous hearings and identify those persons who I think would have answered the second question differently and possibly have a followup, because the level of importance that I attach to the legislation that we've been discussing is highly influenced by the level of significance we attach to international cooperation and coordination and the degree to which you believe that is possible with what previous panelists have testified as being an uneven, diffused, fragmented voice.

I might parenthetically say that one of the reasons given for the effective coordination among central bankers is the fact that within that area we do have a single voice and that there has been an increasing history of cooperation in that dimension, but that has not been true in equity and commodity markets.

I do not have the capacity to evaluate the truth of that representation, but that is a representation that has been made.

Mr. RUDER. Sir, that's right. The banking community has been much more unified in its analysis of what's happening. The securities markets are far behind in that regard.

My recent trip to Britain led me far along the way toward my understanding of that, and I can confirm that.

Mrs. GRAMM. But that doesn't mean there has been no coordination ongoing at the staff levels, et cetera all these years.

Senator GRAHAM. Thank you, Mr. Chairman.

Senator RIEGLE. Thank you, Senator Graham.

Following up on the line of questioning I was pursuing before in terms of the degree to which you had been advised or questioned beforehand in terms of drafting this legislation, certainly there's no requirement that you be. The chairman is free to draft a bill and often does and put it in with cosponsors, so that is entirely appropriate. But just speaking for myself, I think on a matter of this complexity in terms of all of the cross-connections and particularly in terms of existing authorities—how existing authorities that each of you may have may be impacted by aggregate decision making of a three-person body, I think raises a host of issues that need careful thought and need pretty careful examination.

I think the issue of the Fed Chairman being the odd man out on occasion where if we had this body and the three of you were to have a split in thinking and the SEC and the CFTC were together in opposition to the Fed, the legislation as drafted does not in my view sufficiently address that question.

So I want to think that question through better in my own mind.

I am told by some of the market participants that the self-regulatory organizations are really not moving fast enough in talking with one another and trying to resolve what can be resolved short of some kind of an administrative push by the administrative agencies. When I hear that, I take it to be real.

Now are you hearing that as well or not?

Mr. RUDER. Could I respond to that? I met this week with Mr. Phelan, the chairman of the New York Stock Exchange, and discussed with him the importance of cooperation with the commodities markets directly and emphasized my belief that the appropriate way for these remedies to take place is for the markets themselves to reach agreement. I said that to him privately and I'm willing to say it publicly, that I think that the first level of cooperation has to be at the market level. I know that he is in contact with Mr. Melamed of the Mercantile Exchange, and I'm hoping that the two of them and the options markets and the stock exchanges can reach agreements among themselves which will be self-interested, market-oriented agreements designed to prevent another October 19.

Senator RIEGLE. Implicit in what you say and it dovetails with what I'm hearing, and that is that they still have some distance to go, that they have not been able to in effect move through those discussions and reach judgments and reach some sort of set of final understandings.

Mr. RUDER. That's right, but you should be aware that the Mercantile Exchange has taken two steps which I think are useful. One, just this week they've put in a price limit of 15 points which translates to 120 points on the Dow Jones, which means that their market will shut at that point. They have raised their margin levels to \$18,000 per contract, which is a margin level of 13 percent, which is a positive step. The New York Stock Exchange has independently put in its 50 point DOT limitation, a matter which I can't discuss but which is going on there, and I think the next step is that these market participants move carefully to discuss coordinated market plans.

Senator RIEGLE. How often are they meeting? Every day?

Mr. RUDER. Oh, no.

Senator RIEGLE. Every week?

Mrs. GRAMM. There are discussions that go on at the staff level as well as at the principals' level.

Senator RIEGLE. Every day?

Mrs. GRAMM. I don't know if it's every day.

Senator RIEGLE. Why shouldn't it be every day? I mean if this is something that needs to be done and it's going to be done at the self-regulatory level, then why shouldn't people sit down together for as long as it takes and get it done?

Mrs. GRAMM. I think there's not only coordination among themselves but also with their own members. I also would add that Chicago Mercantile Exchange has put in opening price limits as well.

Senator RIEGLE. Have either of you received any static coming back from any of the market participants that things are moving slower than maybe they should?

Mrs. GRAMM. I have not.

Senator RIEGLE. That's surprising I would hear it and you folks would not.

Mr. RUDER. Well, I'm not saying I haven't heard it. There has been significant concern in the equity markets over the effect of the futures markets on the stock exchanges. I happen to think that that concern translates differently than it will translate once there's full understanding of the way these two markets work.

Mrs. GRAMM. Right.

Mr. RUDER. And I should emphasize, Senator, that I think among the three of us there is a substantial agreement, as Chairman Greenspan indicated earlier, on the value of the derivative products as a hedging device for large portfolio managers. We don't want to destroy that in the process of attempting to decrease volatility.

Senator RIEGLE. Mrs. Gramm.

Mrs. GRAMM. I was just going to point out that I had indicated some concern over uncoordinated circuit breakers but in terms of whether or not that process of the exchanges getting together and discussing whether or not that process was moving along fast enough, I have not been aware of concerns over that. I do know that they have been meeting. We hosted a meeting recently.

Senator RIEGLE. Let me ask you both to take a reading on that problem if you would. I'd like you to talk to the respective participants that you work with and see what issues are left unresolved at the self-regulatory level cross-market issues, and let's see if there are unresolved issues if they could be resolved. It seems to me the clock is running. I understand the frustration of the chairman. He's asked for legislative recommendations. They have not been forthcoming. The administration seems to be taking a terribly long time to decide what it wants to do, if anything, and I think that is a frustration to the chairman. I don't purport to speak for him but that's my observation. And so I think clearly the feeling has been that there needs to be some kind of a push to try to move things along at a faster rate.

Now granted these are very complex subjects and sometimes you can go faster than you should, but weeks and months have passed here and it seems to me that the unresolved issues ought to be re-

solved. It seems to me that it's not sufficient to come in and sort of talk around things and say we've got issues that we haven't been able to settle yet at one level or another and we're working on them, and that's the best we can do. It seems to me that we've got enough signals from the President's Commission to move with dispatch here that seems to me these issues ought to be hammered out.

Mr. RUDER. I might say, Senator, that one of my missions this week was to communicate to the self-regulatory organizations the sense of time urgency that I feel, and I think the Senate feels, and I think the President feels, by establishing a working group with a fixed time limitation on it.

Senator RIEGLE. Well, we thank you for your testimony today. There may be other questions that will be submitted for the record. Thank you.

[Whereupon, at 12:20 p.m., the hearing was adjourned.]

[Responses to written questions and additional material supplied for the record follows:]

RESPONSE TO WRITTEN QUESTIONS OF SENATOR PROXMIRE FROM
ALAN GREENSPAN

Question 1: Stock market prices have recovered to some extent since the crash. And that is one measure of consumer confidence in our stock markets. The volume of shares and derivative products traded remains substantially below what it was before the crash. Volume is another measure of market confidence. Do you consider that market participants are registering a vote of "no confidence" by avoiding the markets at this time? Could it be that the public is not satisfied with the progress that the regulatory agencies, SROs, the Administration and the Congress has made in remedying the deficiencies that the crash revealed in our financial markets?

Answer: Trading volume is at best an ambiguous indicator of confidence in the markets per se; indeed, it could be more an indicator of the uncertainty of underlying economic trends or of the degree of disagreement among market participants. Be that as it may, my suspicion is that the slackening in trading activity does reflect a degree of caution on the part of investors and dealers, as well as some reassessment of the utility of market strategies employed before October 19. I think that it probably would be going too far to say that the market generally is registering a vote of no confidence, owing to dissatisfaction with progress on regulatory issues raised by the events of October. Nonetheless, it certainly is my view that we should seek to resolve those issues as quickly as we can, and I believe the President's working group is an appropriate step in that direction.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR PROXMIRE
FROM DAVID S. RUDER

Q.1. Stock market prices have recovered to some extent since the crash. And that is one measure of consumer confidence in our stock markets. The volume of shares and derivative products traded remains substantially below what it was before the crash. Volume is another measure of market confidence. Do you consider that market participants are registering a vote of "no confidence" by avoiding the markets at this time? Could it be that the public is not satisfied with the progress that the regulatory agencies, SROs, the administration and the Congress have made in remedying the deficiencies that the crash revealed in our financial markets?

As you point out in your question, the fact that stock prices have recovered to a degree since the market break evidences the fundamental soundness of our capital markets. The precise reason(s) for the decline in volume on the derivative markets is unclear, however, and it is almost impossible to separate out the causes of such reduced trading activity from more general concerns regarding the economy. Nevertheless, we have been informed by representatives of many firms and the Securities Industry Association that many public customers remain concerned over stock market volatility. It is possible that, to the extent the derivative markets did not perform as well as investors had expected in October, investors now may be less willing to rely on those markets. Moreover, the greater volatility in the markets in general appears to have increased the costs of trading in those markets.

Q.2. The stock exchanges vigilantly police intramarket frontrunning. Every trade is computer-monitored and every suspicious transaction investigated. For the record, please submit the number of intramarket frontrunning investigations undertaken in 1987 along with any resulting penalties and enforcement actions. Given that intramarket frontrunning is a present danger, and that the exchanges commit millions of dollars in computer hardware and manpower to police it, and that you have many enforcement actions, we now assume that this practice spreads between markets. Intermarket frontrunning is just as easy to commit as intramarket frontrunning. Yet, we are aware of only two investigations, and no enforcement actions. Doesn't this demonstrate that you are unable to police this fraud with current law?

During 1986, 1987, and to date in 1988, the securities self-regulatory organizations ("SROs") filed 6 disciplinary actions involving intramarket frontrunning violations (one in 1986, one in 1987, and four in 1988). Four of these violations occurred in the options markets; two occurred in the equities markets. Attached as Appendix A is a detailed list of these actions.

You are correct that opportunities exist for trading abuses between the index futures, options, and securities markets. The Commission and the SROs have worked steadfastly since the late 1970s to enhance surveillance systems at each of the equity and options markets and to improve surveillance sharing capabilities among the SROs. Under the current regulatory scheme, the SROs conduct surveillance for and prosecute intramarket and intermarket frontrunning as violations of SRO rules prohibiting "trading ahead" of customers and violating just and equitable principles of trade.

Routine inspections by Commission staff of SRO surveillance, investigatory, and disciplinary programs have found that, overall, the securities SROs are adequately policing their markets for these trading abuses. For the years 1986 to 1988 (to date), the SROs have filed five disciplinary actions for intermarket violations (three in 1986, one in 1987, and one in 1988). Further enhancements may be needed, however, for the prosecution of intermarket frontrunning between the futures and equities markets. In this regard, we are pleased to note that the Chicago Mercantile Exchange and Chicago Board of Trade participated in the most recent Intermarket Surveillance Group meeting. Participation by the futures exchanges in this group would permit the automated access for surveillance purposes of both stock and futures information. The Commission also notes that the NYSE recently announced its intention to file a proposed rule change with the Commission that explicitly would prohibit its members from frontrunning between these two markets.

Q.3. Hayne Leland of the University of California at Berkeley, and the theorist behind portfolio insurance, recently suggested in an interview in Barron's Magazine that the specialist system at the NYSE be amended to use an open outcry auction, rather than the specialist book system. Professor Leland characterizes this proposed change as a movement toward "sunshine markets." The Freedom of Information Act has been valuable in achieving democracy in government in the United States. Do you not agree with Professor Leland, that greater dissemination of information would benefit all traders, big and small, in our stock markets?

As the Committee is aware, when the Commission was charged with facilitating the development of a national market system it explored at great length the feasibility of developing a central limit order file (what is today referred to as an "open book"). That exploration involved a protracted and voluminous review of the various institutional issues raised by such a

proposal. 1/ Some of the questions included: Would market orders be disclosed? Would time priority be required? How would blocks be negotiated?

Ultimately, the Commission concluded that such a radical change in the markets was unnecessary. The Commission, however, supported a number of private initiatives designed to experiment with such an approach. For example, the Commission has approved the Cincinnati Stock Exchange's National Securities Trading System ("NSTS"), a fully automated electronic trading system. 2/ Orders, which are priced before they are entered into the system, are stored, queued and executed by the system's computer according to price and time priorities. Another example of a private initiative is the trading system operated by the Instinet Corporation. 3/ This system allows subscribers to enter buy and sell orders and indications of interest, negotiate with other subscribers in the system, and execute trades. The Commission also understands that the National Association of Security Dealers, Inc. ("NASD") is currently developing a limit order file for use in conjunction with its small order execution system, "SOES". 4/

Regarding Professor Leland's suggestion, it is unclear what his specific proposal would entail or what his responses would have been to the various questions which were posed during the late 1970s and early 1980s when these issues were last addressed. The Commission's Division of Market Regulation would welcome discussing with Professor Leland specific proposals he may have.

In this regard it should be noted that "sunshine markets" exist to a greater degree in the stock market than in the open outcry system. Accurate, continuously updated stock quotations

-
- 1/ See, e.g., Securities Exchange Act Release No. 15770 (April 26, 1979) (proposing a rule to provide for price protection of public limit orders).
 - 2/ See Securities Exchange Act Release No. 19315 (December 9, 1982), 47 FR 56236.
 - 3/ See Letter from Richard G. Ketchum, Director, Division of Market Regulation, Commission, to Daniel T. Brooks, Cadwalader, Wickersham & Taft, dated August 8, 1986 (staff no-action position regarding Instinet's non-registration with the Commission as an exchange, an association, or a clearing agency).
 - 4/ NASD 1987 Annual Report at 5.

are disseminated, and such quotations must reflect at-the-market trading interest on the limit order book as well as in the trading crowd. Unlike in the futures markets, ^{5/} firms can "shop" blocks either off the floor or on the floor, and can pre-announce buying or selling intentions. Further, limit orders away from the market can be sent to the floor and exposed to the specialist, while such orders in an open outcry system would remain with a floor broker or not be sent to the floor.

Finally, we do not believe that opening up the specialist's book on October 19 would have had any significant impact. The lack of buying interest on that day was due to other factors, such as the huge sell imbalances, large futures discounts, and unwillingness of upstairs firms to provide buying support in a rapidly declining market.

Nevertheless, the Commission recognizes the importance of the central point raised by Professor Leland -- how to provide liquidity for portfolio-sized transactions. To that end, the Commission has supported the development of "basket" trading facilities for stocks. The Philadelphia ("Phlx") and American ("Amex") Stock Exchanges have proposed one such approach. ^{6/} In addition, the Commission understands that the Midwest Stock Exchange is exploring a related product.

5/ See In the Matter of Kidder, Peabody & Co. et al., Complaint and Notice of Hearing before the Commodity Futures Trading Commission, CFTC Docket No. 88-6 (January 29, 1988).

6/ See Securities Exchange Act Release No. 25495 (March 23, 1988), 53 FR 10311 (File No. Phlx-88-7), and File No. SR-Amex-88-10.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR GRAHAM
FROM DAVID S. RUDER

Q.1. In light of the March 30, 1988 article by Martin Mayer which appeared in the American Banker, Senator Graham raised a number of questions about the role that credit played in the Market Break. Specifically, he raised the following questions:

1. What is purpose credit?

Purpose credit is a term used in the securities industry to refer to credit that is extended to purchase or sell securities. 7/ The Board of Governors of the Federal Reserve System ("FRB") regulates the use of purpose credit pursuant to Regulations G, T and U.

As a general matter, Regulation U, which applies to loans by banks, limits the amount of purpose credit that can be extended to customers. For equity securities listed on an exchange, or certain over-the-counter securities, the maximum credit that may be extended is 50% of the market value of the security. Regulation U provides exemptions from the maximum loan limitations that permit banks to make special purpose loans to broker-dealers, on a good faith basis, where the loans are secured by hypothecated customer securities, are used to finance the purchase of securities for prompt delivery with repayment to the bank, or where certain emergency conditions exist. In addition, there are specific exemptions in Regulation U that permit banks to lend on a good faith basis to finance the positions of block positioners, specialists, and over-the-counter market makers. Because the collateral requirement under Regulation U for loans to finance specialists' and market makers' positions is not specific, banks individually determine the maximum amount they will lend against particular classes of securities. While there is a range of collateral value provided by the banks that depends upon the creditworthiness of the particular customer, the advance rates (i.e., the amount a bank will lend against collateral) tend to range from 75-90% of the value of the securities.

Q.2. The preface to Senator Graham's question relates the idea that the SEC was granting exemptions under Rule 3b-8 of which the FRB was unaware. Senator Graham asks if Mr. Mayer's article is correct in saying that arbitrageurs in takeover bids are part of an exempt group that is not bound by margin requirements. In addition, Senator Graham requests that the Commission provide copies of interpretive or exemptive letters on Rule 3b-8.

Rule 3b-8 defines the terms "Qualified OTC Market Maker," "Qualified Third Market Maker," and "Qualified Block Positioner," for use in Regulation U. These terms, which had been used in three separate Commission rules (Rules 17a-12, 16, and 17), were consolidated in Rule 3b-8, and the separate rules

7/ The term "purpose credit" is defined in the definitional sections of Regulations G, T and U, which are promulgated and administered by the FRB. See 12 C.F.R. §§ 207.2(1), 220.2(u); 221.2(k).

were rescinded. 8/ Rules 17a-12, 16, and 17 had required that broker-dealers notify the Commission when they began acting as, or ceased acting as, OTC market makers, qualified third market makers, or block positioners in particular securities. The rules had also required that these firms file quarterly reports indicating the amount of exempt credit they held at the beginning and end of the reporting period. The reporting requirements were eliminated because of concerns that the costs to broker-dealers were not offset by any substantial regulatory benefits. In particular, it was believed that the same information could be obtained by the Commission and SROs through their inspection programs. Nevertheless, broker-dealers qualifying for any of the exemptions still must provide written notification of their status to the bank that extends them credit.

Since Rule 3b-8 is merely definitional, the Commission does not grant exemptions from its provisions. Moreover, contrary to the statements in Mr. Mayer's article, our review reveals that no written interpretations of the rule have been offered by the Commission's staff since it was adopted in 1983.

Major investment banks are among the largest participants in the risk arbitrage field. These firms borrow from a number of sources to finance their positions in the U.S. securities markets, as well as their non-securities activities in the U.S. and abroad. A major source of borrowing can be the sale of commercial paper through their holding companies. In addition, banks frequently lend on an unsecured basis to broker-dealers or their holding companies. In these instances, the credit may be used for any number of purposes that would not fall within the definition of purpose credit.

The exemptions in Regulation U for specialists and qualified OTC market makers generally are not available for risk arbitragers, because the specialists' and market makers' activities contemplate continuity of activity and in particular maintenance of two-sided market quotes. As a general matter, risk arbitragers also would not qualify for the exemption in Regulation U for block positioners. In contrast to block positioners, who acquire large positions for short periods of time in order to facilitate a transaction, risk arbitrage normally involves the commitment of capital as an investment, with the expectation that the broker-dealer will profit from holding securities of an issuer that is subject to a merger, acquisition, tender offer, or similar recapitalization. Finally, most risk arbitragers would not qualify as third market makers under Regulation U, because they

8/ See Securities Exchange Act Release No. 20121 (August 26, 1983), 48 FR 39604.

do not quote competitive bids and offers on a regular and continuous basis.

As a general matter, credit extended to finance the purchase and sale of securities by broker-dealers solely engaged in risk arbitrage would not be exempt from Regulation U. Consequently, firms borrowing from banks to finance positions for risk arbitrage would generally be subject to a 50% collateral requirement. Nevertheless, firms which engage in risk arbitrage also may engage in other activities for which there is an exemption. Under Regulation U, it is the bank's obligation to assure that the credit is used solely for the purpose for which the exemption has been granted. A broker-dealer that causes a bank to violate Regulation U would itself be liable under Regulation X.

0.3. Did the severity of the crash in part result from a pull back of credit by banks who had insufficient margin because of these rule exemptions? Doesn't this SEC-FED coordination breakdown defeat the anti-speculative purpose of margin regulation?

Although some newspapers reported that the severity of the market break was influenced by a withdrawal of credit by banks, the Division of Market Regulation indicated in its Staff Report 2/ that it did not find any generalized restriction of credit during the market break. There was, however, some tightening of credit to broker-dealers by individual banks, including regional and foreign banks. While the decline in stock prices prompted some banks to reduce the amount of funds they were willing to lend against securities pledged as collateral, the staff's interviews suggest that the major New York City banks continued to provide the liquidity necessary to finance the positions of market makers and specialists. Those specialists or market makers that were not well capitalized were perceived to be a source of credit exposure by banks. The banks, however, indicated that during the market break they made lending decisions on a case-by-case basis and that the demand for credit did not exceed the banks' internal lending guidelines.

Banks that lend to firms that focus any significant portion of their capital on risk arbitrage activities generally require that the loans be secured by a perfected interest in a basket of securities maintained at the Depository Trust Company, or pursuant to agreements to pledge, in which the broker-dealer segregates securities on its books and records for the benefit of the lien holder. When banks lend to broker-

2/ SEC Staff Report, The October 1987 Market Break, at pp. 5-19 to 5-32.

dealers on a secured basis, they receive lists each day indicating which securities are being used to collateralize their loans. Broker-dealers are not permitted by the banks to provide collateral with a concentration of any particular issuer's securities, so it is unlikely that a decline in a particular issuer's securities would significantly impair a bank's security interest or require an intra-day margin call. These daily collateral lists inform the bank of the securities it has extended credit to finance, and are closely reviewed to assure compliance with the lending agreements.

During the market break, firms that devoted significant portions of capital to risk arbitrage were a concern to banks. However, although collateral for these firms was diversified, the banks were aware that market-wide declines may have affected their capital. To adjust for this risk, some banks made intra-day margin calls, which required the broker-dealers to provide more collateral to secure their loans. Despite significant declines in the market, we are unaware of any banks that had defaults on loans to risk arbitragers. Moreover, our subsequent conversations with banks and broker-dealers have not suggested the need for any new regulation in this area.

Appendix A

FRONTRUNNING - SRO Enforcement Actions Reported to the Commission under Rule 19d-1 during 1986, 1987, to 4/15/88*

INTRAMARKET FRONTRUNNING

<u>Year</u>	<u>#</u>	<u>SRO</u>	<u>Member and Sanction</u>
1988	1	Amex	Berkman & Leff, Inc., fined \$1,500.
	3	CBOE	Trader/Members Rudnik, Ruschli and Rusinak, each fined \$1,500.
<u>(TOTAL 1988 4)</u>			
1987	1	MSE	Member Andrews Equities, Inc., fined \$2,000. President/Trader J.D. Andrews, fined \$8,000 and suspended 3 weeks.
1986	1	CBOE	Trader/Member B. Fatoorachi, fined \$500.
6 = TOTAL Intramarket frontrunning			

INTERMARKET FRONTRUNNING

1988	1	CBOE	K & M Investment Co. and trader W. Johnson, fined \$5,000 and censured/fined \$7,500 respectively
1987	1	CBOE	PruBache, Inc. censured, fined \$15,000.
1986	1	Phlx	Member/Traders DeMartino and Vendette, fined \$10,000 jointly & severally.
	1	CBOE	Saloman Brothers, Inc., fined \$5,000.
	1	CBOE	Gruntal & Co., Inc. and trader, fined \$7,500 jointly and severally
<u>(TOTAL 1986 3)</u>			

5 = TOTAL Intermarket frontrunning

TOTAL FRONTRUNNING completed actions for 1986, 1987, 1988 = 11

*As frontrunning violations frequently take several months to investigate and prosecute, some of these final disciplinary actions reported to the Commission under Rule 19d-1 were opened as early as 1984.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR PROXMIRE FROM
WENDY GRAMM

Q.1. Stock market prices have recovered to some extent since the crash. And that is one measure of consumer confidence in our stock markets. The volume of shares and derivative products traded remains substantially below what it was before the crash. Volume is another measure of market confidence. Do you consider that market participants are registering a vote of "no confidence" by avoiding the markets at this time? Could it be that the public is not satisfied with the progress that the regulatory agencies, SROs, the administration and the Congress has made in remedying the deficiencies that the crash revealed in our financial markets?

R. The dramatic fall in stock prices in October 1987 reflected a significant change in investors' expectations about the future course of stock prices and their degree of confidence regarding whether buying stocks at current price levels is likely to yield significant profits in the months ahead. The bullish market psychology prevailing earlier in 1987 turned bearish in the second half of the year, most noticeably from October onward. This significant change in investor perceptions, both at the individual and the institutional levels, appears most likely to have

contributed to the decline in trading volume on stock index futures markets more than any loss of confidence in the integrity of those markets or in the regulatory process. Furthermore, considerable progress in developing coordinated responses to strengthen the current regulatory and self-regulatory structures is being made both in Presidential Working Group on Financial Markets and among the securities and futures exchanges.

Responses to Questions from Senator William Proxmire

Q.2. The futures exchanges vigilently police intramarket frontrunning. Every trade is computer-monitored and every suspicious transaction investigated. For the record, please submit for the record the number of intramarket frontrunning investigations undertaken in 1987 along with any resulting penalties and enforcement actions. Given that intramarket frontrunning is present danger, and that the exchanges commit millions of dollars in computer hardware and manpower to policy [sic] it, and that you have many enforcement actions, we now assume that this practice spreads between markets. Intermarket frontrunning is just as easy to commit as intramarket frontrunning. Yet we are aware of only two investigations, and not enforcement actions. Doesn't this demonstrate that you are unable to police this fraud with current law?

R. In 1987, futures exchanges took disciplinary action and issued sanctions against 11 members for violation of trading ahead, or intramarket frontrunning, rules. These actions are summarized in Appendix 1. The exchanges also initiated numerous investigations into possible trading ahead activity which, for a variety of reasons, were closed or remain open for further action.

With respect to intermarket frontrunning, futures exchanges have sufficient authority to take action against such an offense. All exchanges that trade stock index futures contracts have interpreted their rules that govern "just and equitable principles of trade" and "acts detrimental to the interests of the exchange" as prohibiting intermarket frontrunning. In addition, where frontrunning activity involves fraud on a customer or price manipulation, enforcement actions may be brought under Sections 4b or 6(b) of the Commodity Exchange Act. The federal securities laws similarly do not expressly prohibit frontrunning, although frontrunning conduct may be cognizable as fraud or manipulation. In this connection, the Securities and Exchange Commission staff has taken the position that frontrunning enforcement is the responsibility of the securities exchanges.

Futures exchanges and Commission staff have participated and will continue to participate in Intermarket Surveillance Group ("ISG") meetings for the purpose of facilitating the timely and effective communication of surveillance data to assist the prosecution of intermarket frontrunning. In particular, the futures exchanges and Commission staff are participating in an ISG subgroup which is developing standards and procedures for the sharing of surveillance data and is identifying the specific intermarket activity to which such data should relate.

Q.3. The Chicago exchanges stress that margin in the futures market serves as a performance bond. Given daily settlement of variation margin, there is no threat of problems from default. But margin that's federally regulated is intended also to serve to govern speculation through leverage. How do the futures markets govern speculation?

R. All futures markets are required by Commission regulation 1.61 to have rules limiting the size of positions any individual speculator may hold or control in any futures or option contract. The purpose of these speculative position limits is to prevent excessive speculation in any market arising from extraordinarily large speculative positions which may cause sudden or unreasonable fluctuations in commodity prices. These speculative position limit rules are intended as prophylactic measures to restrain the speculative positions of individuals within levels generally commensurate with the breadth and liquidity of the underlying cash market.

In stock index futures, however, the largest positions are held by institutions--pension and endowment funds, securities broker/dealers and investment bankers--rather than speculators. In mid-October of 1987 all commercial traders accounted for approximately 65 percent or more of total open contracts in the S&P 500 stock index futures, the industry's largest stock index contract. Large speculators, in contrast, held less than 5 percent of total open interest.

Q.4. On February 3rd, Chairman Ruder told us that financial futures utility as portfolio insurance is questionable. I quote: "October demonstrated clearly that liquidity (promised by portfolio insurance) will not be there in extreme situations. As a result, the use of portfolio insurance reportedly has been scaled back dramatically." Do you agree? If so, what is the value of financial futures?

R. Portfolio insurance is one of many hedging strategies involving stock index futures. Our market surveillance data, supplemented by interviews of some firms that were most prominent in managing portfolio insurance accounts for pension and other funds, do indicate that there has been a very dramatic drop in the use of that strategy since October 1987.

There has also been a dramatic drop in the trading of equity options, the instrument most similar to portfolio insurance. For example, CBOE equity option volume has declined nearly 50% in 1988 compared to August and September of 1987. The portfolio insurance use of stock index futures, while substantially smaller than in 1987, is still a relevant market factor given the reduced trading volume in the markets. Moreover, portfolio insurers currently are exploring ways to modify their products to meet the demands

expressed by their customers for ways to cope with turbulent market periods.

Despite the decline of portfolio insurance, stock index futures, particularly the S&P 500 contract on the Chicago Mercantile Exchange, continue to have broad institutional use. This continued widespread use by pension and endowment funds, banks, and other financial institutions demonstrates the economic value of stock index futures. For example, on September 30, 1987, open interest in that future totalled 114,152 contracts, of which reportable commercial participants accounted for 59 percent of the long contracts and 64 percent of the short. On March 31, 1988, open interest on that contract totalled 110,129 contracts, with reportable commercials accounting for 72 percent of the long and 59 percent of the short positions.

Q.5. Most agree that the stock market fell in part because it was overvalued. Chairman Greenspan says that "the use of portfolio insurance by large institutional investors is thought by many to have contributed both to the high level of share prices reached in late summer and to the heavy selling pressure in mid-October. Do you agree? Did futures margin requirements play a role? If not, why not?

R. While the hypothesis that portfolio insurance strategies contributed to both the upside and the downside of the 1987 peak in the stock market has a certain plausibility, it is questionable whether that one trading strategy had a significant influence in either direction. At the end of 1987, the NYSE stated that the value of all stocks listed on that exchange was \$2.2 trillion, and others have estimated the value of all outstanding stocks at \$3 trillion. At its peak the value of portfolios utilizing portfolio insurance strategies was estimated at most to be \$100 billion, or less than 4 percent of the value of all outstanding stocks.

Between January and August of 1987 the value of stocks in U.S. markets increased approximately 30% or \$600 billion. As mentioned above, the total value of debt and equity holdings in pension fund assets under portfolio insurance plans was estimated to be no more than \$100 billion dollars. If those pension funds shifted as much as \$30 billion of

their fixed-income assets to equity all in 1987, and that shift caused a highly unlikely dollar-for-dollar effect on equity valuation, the contribution of portfolio insurance would have been less than 5% of the increase in the value of stocks during the first eight months of 1987.

These figures indicate that the role of portfolio insurance in the rise and fall of stock prices during 1987 likely has been exaggerated. Theoretically, the availability of hedging should increase the confidence of portfolio managers in holding any inventory, including a portfolio of stocks, and, as such most likely caused portfolio managers to maintain larger equity positions than they otherwise would have held during 1987. In like vein, the sudden collapse in stock prices may have eroded portfolio managers' confidence both in expected future returns to their stock portfolios as well as the likely success of portfolio insurance as a hedging strategy.

The Commission does not believe that margin requirements for stock index futures had any significant impact on the rise and fall of stock prices, although the futures margin system successfully performed its primary function of maintaining the financial integrity of the market during a period of severe stress. Futures margins did not encourage a significant speculative participation in the overall

movement of stock prices because the stock index futures market largely consists of institutional rather than speculative positions. Since these institutional futures positions generally are unleveraged and represent an extension of their stock market positions and strategies, they should not have an independent effect on stock price levels.

Q.6. Some worry that the unilateral actions adopted by the various exchanges exacerbate market volatility. Alger Chapman, Chairman of the Chicago Board Options Exchange recently warned we could have a crash "worse than in October." What is your view? Specifically, how do you view the Big Board's decision to close its electronic order system known as DOT when the Dow swings 50 points?

R. The President's Working Group on Financial Markets has developed a coordinated response to intermarket issues. The securities and futures exchanges are considering rule changes that would implement the Working Group's proposals.

The Commission believes that the threat of another stock price collapse of the magnitude of last October's has been reduced substantially. The Commission holds that view because, among other factors, the bullish market psychology no longer exists, despite the continued strength of the U.S. economy, and stronger inter-exchange surveillance networks and other self-regulatory improvements have been established since last October.

With respect to the New York Stock Exchange's determination to prohibit the use of its automated order routing system involving index arbitrage when the Dow Jones Industrial Average reaches a value 50 or more points above or below the

previous day's closing value, the CFTC expressed its view to the Securities and Exchange Commission (SEC) in response to the SEC's request for public comment. That letter, dated April 1, 1988, advised the SEC that, in the CFTC's view, such a prohibition is not a coordinated intermarket circuit breaker. As the Brady Task Force recognized, index arbitrage is the mechanism that links the stock market and the stock index futures market. To the extent that the proposal diminishes the efficient and direct linkage between the equity and derivative markets, it could exacerbate unsatisfactory market performance. Moreover, since arbitrage transactions involve concurrent offsetting buy and sell orders, they are typically price neutral.

Q.7 Many in the American investing public are fed up with what they call program trading. This Committee receives calls every day asking us to outlaw it. The Big Board itself instituted a rule that limits program trading when the Dow swings 50 points. What do you say to the American investing public about program trading? How do you propose to restore public confidence?

R. The public concerns over "program trading" are much like concerns raised some years ago about the advent of block trading in the stock market. Much of the concern stems from a lack of understanding of what program trading really is and a dissatisfaction with the lower level of stock prices that has prevailed since last October. Program trading is simply the simultaneous purchase or sale of a basket of stocks, for whatever reason.

One type of program trading that is futures related is "index arbitrage." This strategy involves purchases (or sales) of baskets of stocks and nearly simultaneous sales (or purchase) of an equivalent amount of futures contracts for the purpose of profiting from temporary misalignments between stock and stock index futures prices. Index arbitrage should not affect the level that stock prices ultimately reach, although it could constitute part of the mechanism through which stock prices reach that level.

Another form of program trading has been called "portfolio insurance." In simple terms, this is a specialized, dynamic form of portfolio hedging that is designed to shift the allocation of a fund's portfolio out of stocks and into cash or bonds to protect the portfolio from a decline in the stock market. This strategy could be implemented in the stock market or in stock index options, but it has been most widely initiated through futures markets in recent years due to the low transaction costs and high liquidity of those markets. The level of portfolio insurance trading, however, has been reduced significantly since last October.

Q.8. The Brady Commission emphasized the need for intramarket coordination. It also discussed the appropriateness of circuit-breakers. Imposing trading pauses when prices move rapidly (price limits) is one form of circuit-breaker. In your testimony you describe limits that have been placed on the price movements on the Chicago Mercantile Exchange (CME), the Chicago Board of Trade (CBT), the Kansas City Board of Trade, and the New York Futures Exchange. The limits imposed appear to have been determined by each SRO independently, because the limits are different. Nevertheless, they have been approved by the CFTC. CME for example, has a schedule of price limits, ranging from 15 to 35, that is contingent on price volatility in the previous month. The CBT's limits (20 or 30) appear more straight forward, but even they are contingent to some extent on volatility. Kansas' limits are 35 or 50. The New York Futures Exchange's emergency price limits expired in January and have not been replaced. To an outside observer, these limits appear to lack harmony and coordination. Why has the CFTC not taken the lead in coordinating and equating these price limits imposed by the exchanges under its jurisdiction?

R. With the recent rule change submitted by the KCBT to reduce its price limits to align them more closely with those for the most actively traded stock index futures contract, the

Mercantile Exchange's S&P 500 contract, the price limits of the three futures exchanges with such limits on their stock index futures contracts are reasonably harmonious. However, the CFTC views the price limits of these three futures exchanges as an initial effort by each exchange to protect its stock index futures market from the effects of unusual volatility of stock market prices. Of more importance at this point is the fact that there are not comparable circuit breakers in the stock market or the stock index option markets regulated by the Securities and Exchange Commission. In that regard, the Presidential Working Group on Financial Markets and officials at the highest level of the futures and securities exchanges are working together to develop a more coordinated approach to these issues.

Q.9. The Federal Reserve has margin setting authority over the stock market and the stock options market but not over the stock index futures market. In fact, the CFTC does not even have margin authority over the futures exchanges. The exchanges set the margin in the futures market which is the one exception to the otherwise sound system of regulation. The SROs cannot be expected to set margin levels above that which provides for a performance guarantee in their market. If higher margin is needed to arrest speculation then the SROs cannot be expected to impose that on themselves can they? It would hurt their business to make good public policy. Shouldn't the Federal Reserve have the authority to harmonize all margin requirements? Surely you do not think that Chairman Greenspan, who is a very able economist, would set margins so high that he would kill the futures business and drive it overseas? Should the CFTC have margin authority? How many times have you invoked the CFTC's emergency authority? Isn't margin setting to control speculation preventative medicine that should be administered before the emergency arises? Your emergency authority only permits you to clean up a wreck but not to prevent one.

R. In comparing margin-setting procedures in the securities and futures markets, it should be noted that while the Federal Reserve Board has margin-setting authority for securities

and securities margins, it has established a substantial number of exemptions to the 50 percent margin requirement generally applicable to public customers, including exemptions for market-makers, arbitrageurs and other securities professionals. Under these exemptive provisions, only good faith margins fixed by negotiation between the lender and the borrowing customers, which are not subject to any specified minimum, are required. Moreover, the Federal Reserve Board has delegated authority to establish margin levels for options on securities to the securities exchanges on which such options are traded. The levels of these margins were comparable to futures margins on October 19.

Further, in evaluating the soundness of the margin systems currently in place in the futures and securities markets, it should be recognized that the futures margining system reflects fundamental differences between the function of margin in futures and securities transactions. The futures markets are mechanisms for the transfer of risk, for example, from a party subject to price risk because of its primary manufacturing, farming or financial operations. The futures margining system is designed to measure the risk involved in each transaction and to establish an appropriate margin level based upon market volatility and the type of trading involved in the transaction. This system requires that both sides to a trade, the long and the short, make

margin deposits and that all losses and gains on positions be paid daily such that, at settlement, no debt on any futures contract remains outstanding.

Futures variation margin must be paid to the clearinghouse by each trader's clearing member to cover any losses on a daily, pay-as-you-go basis. One hundred percent of all losses must be paid out by the firm each day in cash or the markets cannot open for trading the next day. The daily, pay-as-you-go nature of the futures margin system is a key protection afforded by the futures margin system. Consequently, initial margin levels may have very little relationship to the amount of funds necessary to maintain a futures position.

The current system of futures margin authority has worked well over the years and continues to do so. It is one of the principal reasons, along with the requirement that customer funds be segregated from a firm's proprietary funds, minimum capital requirements and constant monitoring for compliance with those rules, that no customer of a firm which is a member of a futures industry self-regulatory organization has ever lost a penny due to the financial failure of the firm throughout the more than fifty-year history of the Commodity Exchange Act, including during the events of October 1987.

Due in part to the efficacy of futures exchange self-regulatory processes, the Commission has rarely had occasion to exercise its emergency authority. Under Section 8a(9) of the Commodity Exchange Act, the Commission is empowered to intervene in margin setting in the event of an emergency. The Commission's long-standing policy in emergency situations is that the exchanges should act in the first instance. As a result, the Commission has found it necessary to take emergency action on only four occasions. Thus, the Commission has acted consistently with the Congress's intent that it balance various broad public interests--including the desire for minimal government intervention in the markets--against the need for carefully selected but effective federal action to assure a sound and viable marketplace.

The soundness of the futures margin system was demonstrated during the October market decline. For example, data for the period between October 1, 1985 and December 10, 1987, show that maintenance margin for the S&P 500 futures contract was sufficient to cover a single day's market loss ninety-six percent of the time.

Thus, the current system has worked well for over fifty years. Indeed, the system has worked well because the exchanges have the incentive and information to set appropriate margins. We therefore believe that there is no need for so fundamental a change in the regulatory structure as would be entailed in transferring futures margin setting authority from the exchanges to the federal government.

Question on Differential Leverage Between
Stock and Futures

Q.10. In your March 18th letter to me (Senator Proxmire) you make a series of assertions about the role of margins. I would like to ask you about several of these.

1. How do you define "open interest" in the market for derivative instruments? Are there not two sides to every trade precisely because this is a derivative instrument?

R. "Open interest" in futures and option markets is the total number of contracts that were entered into subject to the rules of an exchange and that have not yet been fulfilled by delivery, exercise, or offset in accordance with exchange rules. Since for every contract entered into there is a buyer and a seller, for every open contract there also are two sides, generally referred to as longs, representing the buyers' side, and shorts, representing the sellers' side. However, in calculating open interest, each two-sided contract is counted once.

Futures and options are sometimes termed derivative instruments because the value these contracts reflect is derived from the underlying entity, be it gold, wheat, crude oil, treasury bonds or stock indices.

Q.2. You assert on page 29 that "there is no evidence that leveraged futures positions contributed to the collapse of stock prices in mid-October." That may be. But did leveraged futures positions contribute to the bubble in stock prices that led to the crash?

R. It is not likely that leveraged futures contributed significantly to the protracted rise in stock prices prior to October's collapse. Leverage is most likely to be associated with price volatility when it leads to extraordinarily large speculative participation and when a sudden price reversal leads to the rapid liquidation of those speculative positions. Stock index futures were not characterized by large speculative participation, either in the months prior to October 1987 or during that month's collapse when large speculators held less than 5 percent of total open interest.

27-28

Q.3. You assert on Page 30 that, "the S&P 500 futures contract is primarily an institutional market, and its principal users do not have leveraged positions." How can this be? Isn't a futures contract leveraged by definition? You put down a margin deposit that is not equal to 100 percent of the underlying contract do you not?

R. When viewed in isolation, a trader's futures position will appear leveraged whenever the trader pays less than 100 percent margin. However, the Commission's statement was referring to the overall position of institutional traders--including stocks, futures, money market instruments and cash combined. When a pension fund's short futures position is offset by an equivalent or greater quantity of stocks, that overall position is not leveraged. Similarly, when a mutual fund's long futures position is offset by an equivalent amount of cash and T-bills, its overall position also is not leveraged. In neither of these two instances would an institution be forced to liquidate its futures position in the face of a price movement adverse to that position since the margin call could be financed or covered from the offsetting asset position.

For the reasons given above, the Commission believes that the institutional positions in stock index futures during last October's stock price collapse generally were not leveraged, as further evidenced by institutions' increased--not decreased--use of the futures markets during that period. Indeed, many institutions entered the futures market to reduce their exposure to stock price risk through short positions in stock index futures.

Q.4. On page 31 you say, "since the stock index futures market is primarily an institutional market, the 50 percent initial margin requirement of the Federal Reserve Board for public customers is not generally the pertinent figure for comparison to futures margin levels from the standpoint of relative market leverage."

- Are you not confusing the terms "institutional" and "market maker"?
- What does Dreyfus or Fidelity have to pay per \$100 of stock if they use margin to purchase that stock?
- What did Dreyfus have to put down per \$100 dollars of face value in the futures market?
- Institutions, meaning pension funds, endowments and mutual funds, have very different speculative leverage possibilities in the stock and futures markets do they not?

R. We are not confusing the terms "institutional" and "market market." As we explained in the two preceding paragraphs of the March 18th letter:

As the CFTC's large-trader data indicate, the S&P 500 futures contract is primarily an institutional market, and its principal users do not have leveraged positions.

On October 19, reporting commercial traders ^{1/} held about 70 percent of the total open interest. Most commercial traders in stock index futures markets are institutional investors, principally pension funds or broker/dealers, that are engaged in index arbitrage or are hedging their stock market risk. In contrast, large speculators, who are subject to position limits

^{1/}Under CFTC regulations a reporting commercial trader in the S&P 500 futures market is one who has a position exceeding 300 contracts and who has indicated that use of the contract is for hedging or arbitrage purposes.

in the S&P 500 futures market as in all futures markets, held less than 5 percent of the total open interest in mid-October 1987. Thus, in the stock index futures market there is a notable absence of large speculative positions that could be indicative of differential leverage between the stock and futures markets.

On the other hand, the futures positions of hedgers and other commercial users of stock index futures generally are not leveraged. Most have equivalent offsetting positions, normally in the stock market but also in other derivative markets.

As the Brady Commission recognized, the institutional or professional nature of the stock index futures markets renders it appropriate to compare futures margin requirements with those applicable to securities professionals rather than those applicable to individual stock investors. (Brady Report at 65).

If Dreyfus or Fidelity are registered as investment companies, they would generally be prohibited from purchasing securities on margin (Section 12(a)(1) of the Investment Company Act of 1940), unless immediately after any such borrowing there is an asset coverage of at least 300 percent for all the borrowings of such registered company (Section 18(f) of the Investment Company Act of 1940), or they could meet the standards set forth in a recent SEC staff letter restricting leverage, Dreyfus Strategic Investing (SEC Division of Investment Management no-action letter pub. avail. June 22, 1987). In order to avoid being characterized as commodity pools, the futures market transactions of such companies must be similarly

unleveraged, and we have coordinated our rules with those of the SEC to accomplish this. See CFTC Rule 4.5 (17 C.F.R. §4.5 (1987)). This is but one of several areas where we already work closely with the SEC to assure coordinated regulation. Thus, it is our understanding that institutions such as pension funds, endowment funds and mutual funds do not have fundamentally different speculative leverage possibilities in the stock and futures markets. It is also interesting to note that Regulation T allows an institution to take up to 35 days to make a delivery against payment transaction in the securities market whereas losses on futures positions are due the day after the day they are incurred.

Even if Dreyfus or Fidelity were to be deemed to be customers and thus capable of making securities purchases and entering into futures transactions without restrictions on borrowing, we do not believe that the leverage possibilities are very different between the stock and futures markets. In order to compare the futures and securities markets, we may assume Dreyfus or Fidelity could qualify as hedgers and as a consequence did not also under Commission rules need to separately set aside in cash or cash equivalents an amount equal to the face value of their futures contracts. If Dreyfus purchased an S&P 500 futures contract for December 1987 delivery (the nearby contract) at

the closing price of the contract on October 15, 1987 and held the contract open through October 19, 1987, Dreyfus would have had to deposit a total of \$55,875 before the market opened on October 20, 1987 in order to maintain the position. This includes \$7,500 initial hedge margin \$8,000 to cover the loss incurred on October 16 and \$40,375 to cover the loss incurred on October 19. The total margin payments of \$55,875 represent over 55 percent of the value of the futures contract at the close on October 19, \$100,750. Had Dreyfus bought equivalent securities on October 15, it would not have been required to make any payment until October 22 or later due to the general five business-day settlement system in securities trading. Futures trading requires daily payment in cash of all losses and is a 100 percent, pay-as-you-go system.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR GRAHAM FROM
WENDY GRAMM

Q. Question on Purpose Credit and the Crash

In the March 30, 1988 issue of the American Banker, there is a very disturbing article by Martin Mayer on the role that margins and credit played in the crash of October 1987. It appears that many market participants received exemptions from margin requirements in the stock market.

What is disturbing about the article is the notion that neither the Federal Reserve, nor the SEC appeared to be in complete control of the situation. The SEC was granting exemption under their rule 3b-8 and the Fed did not know about it.

From the article it appears that it was not until the Brady Report uncovered this situation that the Fed found out about this problem. The Fed was reported to have been "shocked" to learn of something called "purpose credit".

- o What is purpose credit?
- o Is the article correct in saying that arbitraguers in takeover bids are part of this exempt group which is not bound by margin requirements?
- o Did the severity of the crash in part result from a pull back of credit by banks who had insufficient margin because of these rule exemptions?
- o Doesn't this SEC-FED coordination breakdown defeat the anti-speculative purpose margin restrictions?
- o What does your agency propose to do to address this problem?
- o Would you please provide for the record the file of interpretative letters that you have received on this

issue together with your agencies response to each of them?

- R. Regulation T of the Federal Reserve Board, which governs extensions of credit by and to securities brokers and dealers defines "purpose credit" as credit for, among other things, the purpose of "[b]uying, carrying, or trading in securities." (12 C.F.R. §220.2(u)). Regulation T (§220.18(a)) establishes a margin requirement of 50 percent of current market value for each equity security position held in a margin account. Similarly, Regulation U of the Federal Reserve Board, which restricts extensions of credit by banks for the purpose of buying or carrying margin stock if the credit is secured directly or indirectly by margin stock, establishes the maximum loan value of stock at 50 percent of its current market value.

However, a substantial number of stock market transactions are exempt from the 50 percent margin requirements.

Exemptions have been provided for specialists and other market makers, bona fide arbitrageurs, specialists and other transactions, as specified more fully in Regulations T and

U. In the case of arbitrageurs, specialists and other market-makers, only "good faith" margin, an amount established by private agreement between the borrower and the lender, is required.

The futures markets operate on a "pay as you go" system under which profits and losses are fully paid on a daily basis in the form of variation margin. As a result, at the completion of each daily settlement, no credit exists in the system. Consequently, the CFTC has not had occasion to investigate whether the severity of the October market decline may have resulted in part from restrictions of credit by banks which had insufficient margin due to the Federal Reserve Board's margin exemptions or otherwise. To the extent that the existing exemptions from the Federal Reserve Board's margin requirements for securities are viewed as raising issues concerning excessive speculation or adverse credit impacts, such issues should be addressed in the first instance by the Federal Reserve Board and the Securities and Exchange Commission.

36 - 37

APPENDIX 1Futures Exchange
Trading Ahead Cases1987

<u>Exchange</u>	<u>Rule Violated</u>	<u>Penalty</u>
CME	530.00	10 year suspension ("sus.") \$500,000
CME	530.00	6 month sus. \$50,000
CBT	350.05	180 day sus.
Comex	4.31	2 year sus. \$250,000 fine cease & desist ("C/D")
Comex	4.31	30 day sus. \$45,000 fine C/D
Comex	4.31	1 week sus. \$12,000 fine C/D
Comex	4.31	30 day sus. \$65,000 fine C/D
Comex	4.31	30 day sus. \$50,000 fine
Comex	4.31	30 day sus. \$40,000 fine
Comex	4.31	20 day sus. \$20,000 fine C/D
KCBT	1131.00	\$2,500 C/D

Hearing on the Regulators' Recommendations for Legislation
Dealing with the Stock Market Crash of October 19, 1987

WRITTEN STATEMENT OF

SHERWOOD H. SMITH, JR.

PRESIDENT AND CHIEF EXECUTIVE OFFICER

CAROLINA POWER & LIGHT COMPANY

ON BEHALF OF

THE EDISON ELECTRIC INSTITUTE

BEFORE THE

COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS

U.S. SENATE

MARCH 31, 1988

Mr. Chairman and Members of the Committee:

I am Sherwood H. Smith, Jr., President and Chief Executive Officer of Carolina Power & Light Company. I have served as Chairman of the Edison Electric Institute. I am also a member of the Listed Company Advisory Committee of the New York Stock Exchange, but my comments here are not submitted on behalf of this Committee. I am very pleased to provide this statement on behalf of the Edison Electric Institute (EEI) to the Committee on the overall need for stable as well as flexible and efficient capital markets in order to meet the requirements faced by the investor-owned electric utility industry to provide adequate, reliable and economical electricity. EEI is the association of electric companies whose members serve 97 percent of all customers served by the investor-owned segment of the industry. They generate approximately 76 percent of all the electricity in the country and serve 73 percent of all ultimate customers in the nation.

The Electric Utility Market Place

The electric utility industry plays a significant role in the U.S. economy. Use of electricity as a percentage of U.S. energy requirements has grown from 32.2 percent in 1980 to slightly over 37 percent in 1987. Increasingly, electricity is the energy of

choice in the U.S. and plays a significant role in the economic and physical well-being of Americans. Unlike most industries, the utility industry has a mandate to provide its customers with an adequate and reliable supply of electricity at an economical cost.

Our industry is heavily dependent on a stable and efficient capital market. The electric utility industry invests billions of dollars annually in construction programs, making it the most capital-intensive business in the U.S. investing over \$3 in land, building and equipment for every dollar of operating revenue. For every \$3.03 of investment, the electricity industry generates one dollar of sales, while the average industrial firm invests \$0.60 for every dollar of sales.

In order to maintain and construct the necessary plant and equipment to serve customers, a utility uses two sources of financing: 1) funds generated internally through operations; and 2) funds generated externally through the financial markets from the sale of stocks, bonds and bank loans. During a period of heavy construction, such as was experienced during 1984, electric utilities spent over \$36.6 billion dollars on construction of which approximately 50 percent was generated internally. Thus, \$18.4 billion had to be raised in the capital market. During that year, the electric, gas and water industries issued 8.3 percent of all common stock publicly offered and 9.1 percent of all corporate debt. During 1986 these industries offered 10.5% of all common

stock and 12.6% of all corporate debt. These are clearly impressive numbers. Even in 1987, a period of relatively low construction for electric utilities, the electric, gas and water industries issued 7.4 percent of all common stock publicly offered and 8.4 percent of all corporate debt. It was through these means that the electric utility industry was able to finance its construction programs. During 1987 companies' construction programs totalled \$29.1 billion with about 70 percent of the program financing generated internally. This required that only \$8.8 billion for construction be raised in the capital market.

Because of electricity's importance to the economic infrastructure of the U.S., capital projects cannot be delayed or postponed. In fact, the long construction periods for generation plants (for example, 8-10 years for coal facilities and 14-16 years for nuclear plants) make construction delays difficult if not impossible. Our industry, unlike others, must maintain an ability to continuously raise large amounts of capital with sufficient ease and efficiency, so as not to jeopardize construction programs while at the same time not raising customer rates. Both a volatile market and high capital costs will translate directly into added costs that utilities are forced to pass to customers in the form of higher rates. If the price of electricity increases throughout the Nation, overall American productivity and competitiveness are negatively affected.

Future Capital Needs

Forecasts of electricity demand indicate that over the next five years, both peak electric load and kilowatt-hour requirements are projected to grow at an average of about 2 percent annually. Over the same period, capacity additions are expected to increase at an average annual rate of slightly over one percent. While we are currently winding down a construction cycle, almost all forecasts call for new generation requirements in the 1990's. Despite the current forces to move the electricity market into a competitive bidding arena with utilities taking power from non-utility producers, our industry will still be required to construct generating plants to meet increased demand. This will increase the need to raise the necessary capital to finance construction programs. In addition, we also have a continuing need through our forecast period of 1990 to expend about \$10 billion per year for transmission and distribution facilities.

The North American Electric Reliability Council (NERC), in its September 1987 report, forecast that an additional 79,300 MW of capacity will be needed by 1996 to add to our current capacity of 716,000 MW in place at the end of 1986. Of these capacity additions, approximately 45% or 35,700 MW are not yet under construction. Assuming a mix of fuels to compose these capacity additions, and an average capacity cost of \$2,200 per KW as estimated by the Utility Data Institute, these additions could represent expenditures approaching \$175 billion. If half of these

expenditures are met from internal sources, it leaves \$87.5 billion to be financed from external sources by the year 1996 to meet just these plant additions. Furthermore, by 1996 the NERC forecasts that this industry will have to add approximately 20,000 miles to its existing 183,000 miles of high voltage transmission lines, further adding to the future capital needs of the industry.

S. 2256 - Intermarket Coordination Act

When introducing S. 2256, the Chairman observed that havoc in our financial markets could "export" our status as the preeminent financial center in the world to London, Tokyo or other market centers which are able to meet the challenge of modernization and stability. The electric utility industry would, of course, be adversely affected to a serious extent should anything like that occur.

The bill, as we understand it, is based largely upon findings and recommendations of the Brady Commission's Report on Market Mechanisms. The bill would create an Intermarket Coordinating Committee to act upon the seven major recommendations of the Brady Report. As head of the proposed committee, the Chairman of the Federal Reserve Board would act as tie breaker on issues of irreconcilable difference between the Securities and Exchange Commission and the Commodities Futures Trading Commission. I have not had an opportunity to carefully consider this proposed legislation, nor has our industry. But, I do have some initial comments to make.

The bill identifies the markets' need to develop information systems for monitoring intermarket trading strategies and for detecting/prohibiting various trading abuses. The implementation of such systems could have a favorable impact on the U.S. markets' competitive position because the integrity of these markets would be enhanced. Thus, if indeed such benefits resulted from the legislation, this would be of value to our industry from the standpoint of its ability to raise capital.

One area which may require more analysis deals with margin requirements in the futures market vis a vis those in the stock market. There seems to be no question but that something needs to be done to reduce the elements of pure speculation and "gambling" with the futures market and perhaps the stock market. We are aware, however, that some argue that overly prescriptive rules in this area could add substantially to the cost of using futures to hedge against stock market risk, and that such a development would detract from U.S. markets' ability to compete with the other major financial markets of the world.

In general, the Edison Electric Institute encourages a cautious approach to new federal regulation of the U.S. financial markets. These individual but interrelated markets should be given the opportunity to identify and solve their problems. They should know they must work to reduce their participants exposure to another market break like the one in October 1987. This realization, along with global competitive pressures, should form the stimulus for prompt, effective and cooperative action. If

however, effective action from the markets themselves is not forthcoming then perhaps federal legislation will be required.

Capital Market Regulation

While uncertainty and volatility increase the cost of capital to all industries, overly restricted markets could reduce flexibility and access. Such an environment could have the undesired effects of also increasing the cost of capital. Thus, it is essential that an adequate balance be sought between a regulated market place and one that is flexible and allows for sufficient accessibility. Furthermore, in seeking a flexible balance, it is important that international financing and markets be considered when examining controls and access. As in the past, utility companies should be allowed to seek financing in the international markets wherever advantageous to do so. Conversely, our companies' financing abilities, even domestically, are affected by international markets.

We urge the Committee to examine the recent events that significantly impacted financial markets. We ask that, where necessary, protections against market failures or severe market instability be provided. On the other hand, there should be reliance to the extent possible, on the normal, efficient operation of financial markets.

- 8 -

Regulation that protects the public is desired, which will assist in making the marketplace readily accessible and produce efficiently priced capital. The electric utility industry's future financial well-being and competitive strength will rely, in part, on the balance sought by this Committee and by voluntary changes and reforms by the market themselves.

Mr. Chairman, we appreciate the opportunity to provide these comments and trust that we may participate in any future hearings or other proceedings.

○